



## SEQUENCE LISTING

<110> STAMMER, GERHARD  
HABEREY, MARTIN  
THIERAUCH, KARL-HEINZ

<120> COMBINATIONS AND COMPOSITIONS WHICH INTERFERE WITH  
VEGF/VEGF AND ANGIOPOIETIN/TIE RECEPTOR FUNCTION  
AND THEIR USE

<130> SCH-1815

<140> 09/887,527

<141> 2001-06-25

<150> DE 00250194.8

<151> 2000-06-23

<150> DE 00250214.4

<151> 2000-06-28

<160> 60

<170> PatentIn Ver. 2.1

<210> 1

<211> 1835

<212> DNA

<213> Homo sapiens

<400> 1

ttttacagtt ttccttttct tcagagttta ttttgaattt tcatttttgg ataaccaagc 60  
agctctttta gaagaatgca cagaagagtc attctggcac ttttggatag tacataagat 120  
ttctcttttt ttttttaaat agtcacattc agctcgcttg ctcaaaccag 180  
actcccatat tgggtgagca agatgagccc ataggattcc agagttaata cgtaaccgta 240  
tatacaaaca gccaaaaaac cataatggtg ccacagggat ggagcagggg agggcatctc 300  
taacgtgtcc tctagtctat cttcgctaaa cagaaccac gttacacatg ataactagag 360  
agcacactgt gttgaaacga ggatgctgac cccaaatggc acttggcagc atgcagttta 420  
aagcaaaaga gacatccttt aataactgta taaaatccag gcagttccat taaagggggt 480  
aagaaaacca acaacaacaa aaagcgaggg actgtctgtt gtcactgtca aaaaggcact 540  
tggagttaat gggaccagga ttggaggact cttagctgat acagatttca gtacgatttc 600  
attaaaaggc ttggatgtta agagaggaca ctcagcgggt cctgaaggga gacgctgaga 660  
tggaccgctg agaagcggaa cagatgaaca caaaggaaatc aaatctttac aaccaaattg 720  
catttaagcg acaacaaaaa aaggcaaacc ccaaaacgca acctaaccac agcaaaatct 780  
aagcaaaatc agacaacgaa gcagcgtatc atagctttcc tttgagagaa cgcatacctt 840  
gagacgtac gtgccaacct aagttctcaa cgacagcttc acagtaggat tattgtgata 900  
aaaatgactc aagcgtatgca aaaagtttca tctgttccca gaatccgagg gagaactgag 960  
gtgatcgtaa gagcatagcg acatcacgtg cggtttctta atgtccctgg tggcggatac 1020  
gccgagtcct cggaaggaca tctggacacc actttcagcc acctccttgc aggggcgaca 1080  
tccgccaaag tcatccttta ttccgagtaa taactttaat tcctttctaa catttacacg 1140  
gcaaacagga atgcagtaaa cgtccacgtc cgtcccacgg ctgggctgcc gttccgcttc 1200  
ctccacgaac gggtagcgcg tccatgaga aaggaatttt ggcaatttta tattccacag 1260  
tcaggctgggt ctgcatagc tcatttaatg ttaaaccgca tcaggggcct ctccctccgt 1320  
ttctgccagg ggcttttctt gtcttctctt tggcgagctc gtgggcagat cttctctggt 1380  
gggggctggc tgctggctcc gagggggcat ccgcagtcg tctggctcgt tcctcctgca 1440  
ggctgggcag ctggccacca cttctccgac tcgacccctc caacaagcat cgcagggcac 1500  
tgtctcggg ggtacagacc gtgggtccac attcgtacc actctgttcc acgtcatcca 1560  
ggtacacgag ctgcgtgtag gccgtgctgt ctggggctcg aggtctcttc tctggtgct 1620

cttggacggg	cgggtagttc	tgctgcagag	acaaagcatc	tccccttccc	ttccgggctg	1680
atthttggttc	attcatatct	acgccagagt	ccaaactggc	atcattactt	ccgttccttc	1740
cagctctttg	gagaatcaat	gtatgaatgt	ctaacttgac	cgttggacct	gccatccaag	1800
gagacgaacc	acgcccgggg	gtgcggaagc	ggcct			1835

&lt;210&gt; 2

&lt;211&gt; 581

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 2

gttctagatt	gttttattca	gtaattagct	cttaagaccc	ctggggcctg	tgctaccag	60
acactaacia	cagtctctat	ccagttgctg	gttctgggtg	acgtgatctc	cccatcatga	120
tcaacttact	tectgtggcc	cattagggaa	gtggtgacct	cgggagctat	ttgcctgttg	180
agtgcacaca	cctggaaaca	tactgctctc	atthtttcat	ccacatcagt	gagaaatgag	240
tggcccgtta	gcaagatata	actatgcaat	catgcaacaa	agctgcctaa	taacatttca	300
tttattacag	gactaaaagt	tcattattgt	ttgtaaagga	tgaattcata	acctctgcag	360
agttatagtt	catacacagt	tgatttccat	ttataaaggc	agaaagtcct	tgthttctct	420
aaatgtcaag	ctttgactga	aaactcccgt	thttccagtc	actggagtgt	gtgcgtatga	480
aagaaaatct	ttagcaatta	gatgggagag	aagggaaata	gtacttgaaa	tgtaggccct	540
cacctcccca	tgacatcctc	catgagcctc	ctgatgtagt	g		581

&lt;210&gt; 3

&lt;211&gt; 516

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 3

tagagatggt	ggttgatgac	ccccgggatc	tggagcagat	gaatgaagag	tctctggaag	60
tcagcccaga	catgtgcac	tacatcacag	aggacatgct	catgtcgcgg	aacctgaatg	120
gacactctgg	gttgattgtg	aaagaaattg	ggtcttccac	ctcgagctct	tcagaaacag	180
ttgttaagct	tcgtggccag	agtactgatt	ctcttccaca	gactatatgt	cggaaaccaa	240
agacctccac	tgatcgacac	agcttgagcc	tcgatgacat	cagactttac	cagaaagact	300
tcctgcgcac	tgagggtctg	tgctaggaca	ctgctcagag	ttacaccttt	ggatgtggcc	360
atgaactgga	tgaggaaagg	ctctattgca	acagttgctt	ggcccagcag	tgcatcaaca	420
tccaagatgc	thttccagtc	aaaagaacca	gcaaatactt	ttctctggat	ctcactcatg	480
atgaagttcc	agagtttggt	gtgtaaagtc	cgtctg			516

&lt;210&gt; 4

&lt;211&gt; 1099

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 4

cccacaacac	agggggcctg	aaacacgcca	gcctctctc	tgtggtcagc	ttggcccagt	60
cctgctcact	ggatcacagc	ccattgtagg	tggggcatgg	tggggatcag	ggccccctgg	120
ccacggggag	gtagaagaag	acctgggtccg	tgtaagggtc	tgagaagggtg	ccctgggtcg	180
gggggtgcgtc	ttggccttgc	cgtgccctca	tccccgggt	gaggcagcga	cacagcaggt	240
gcaccaactc	cagcaggtta	agcaccaggg	agatgagtcc	aaccaccaac	atgaagatga	300
tgaagatgggt	cttctccgtg	gggcgagaga	caaagcagtc	cacgaggtag	gggcagggtg	360
ctcgctggca	cacaaacacg	ggctccatgg	tccagccgta	caggcgccac	tggccataga	420
ggaagcctgc	ctctagcaca	ctcttgacga	gcacactggc	gacatagggtg	cccatcagtg	480
ctccgcggat	gctcaggcga	ccatcttctg	ccaccgagat	cttggccatc	tgacgctcta	540
cggccgccag	cggccgctcc	acctgtgggt	ccttggccgg	cagtggccgc	agctccccct	600
ccttctgccg	cagccgctct	tctcgccgag	acaggtaaatt	gacatggccc	aggtagacca	660
gggtgggtgt	gctgacgaag	aggaactgca	gcaccagta	gcggatgtgg	gagatgggga	720
aggcctggtc	atagcagacg	ttggtgcagc	ctggctgggc	cgtgttacac	tcgaaatctg	780

actgctcgtc	acccccacact	gactcgccgg	ccaggcccag	gatgaggatg	cggaagatga	840
agagcaccgt	cagccagatc	ttaccaccca	cggtcgagt	ctcctggacc	tgggccagca	900
acttctccac	gaagccccag	tcacccatgg	ctccccggcc	tccgtcggca	aggagacaga	960
gcacgtcagt	gtgtcagcat	ggcatccttc	tcgttcgccc	agcaacaagc	ctgcagggag	1020
gtctgccacg	cccgttctac	cgcttgccct	ccgggcggcc	caggtggagg	tggggacgat	1080
ggccggagt	acgcccgcg					1099

&lt;210&gt; 5

&lt;211&gt; 1015

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 5

gaggataggg	agcctggggg	caggagtgtg	ggagacacag	cgagactctg	tctccaaaaa	60
aaaaagtgt	ttttgaaaat	gttgaggttg	aaatgatggg	aaccaacatt	ctttggattt	120
agtggggagc	ataatagcaa	acaccccctt	ggttcgca	tgtacaggaa	tgggacccag	180
ttggggcaca	gccatggact	tccccgccct	ggaatgtgtg	gtgcaaagt	gggccagggc	240
ccagacccaa	gaggagaggg	tgggtccgcag	acaccccggg	atgtcagcat	ccccgacct	300
gccttctggc	ggcacctccc	gggtgctgtg	ttgagtcagc	aggcatgggg	tgagagcctg	360
gtatatgctg	ggaacagggt	gcagggggcca	agcgttcctc	cttcagcctt	gacttggggc	420
atgcaccccc	tctcccccaa	acacaaacaa	gcacttctcc	agtatggtgc	caggacaggt	480
gtcccttcag	tcctctggtt	atgacctcaa	gtcctacttg	ggcctgcag	cccagcctgt	540
gttgtaacct	ctgcgtcctc	aagaccacac	ctggaagatt	cttcttcctt	ttgaaggaga	600
atcatcattg	ttgctttatc	acttctaaga	cattttgtac	ggcacggaca	agttaaacag	660
aatgtgcttc	cctccctggg	gtctcacacg	ctcccacgag	aatgccacag	gggccgtgca	720
ctgggcaggc	ttctctgtag	aaccccaggg	gcttcggccc	agaccacagc	gtcttgccct	780
gagcctagag	cagggagtc	cgaacttctg	cattcacaga	ccacctccac	aattgttata	840
accaaaggcc	tcctgttctg	ttatttcact	taaatcaaca	tgctattttg	ttttcactca	900
cttctgactt	tagcctcgtg	ctgagccgtg	tatccatgca	gtcatgttca	cgtgctagtt	960
acgtttttct	tcttacacat	gaaaataaat	gcataagtgt	tagaagaaaa	aaaaa	1015

&lt;210&gt; 6

&lt;211&gt; 2313

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 6

ccagagcagg	cctgggtggg	agcagggagc	gtgcaccgga	cggcgggatc	gagcaaattg	60
gtctggccat	ggagcacgga	gggtcctacg	ctcgggcggg	gggcagctct	cggggctgct	120
ggtattacct	gcgtacttcc	ttcctcttcg	tctccctcat	ccaattcctc	atcatcctgg	180
ggctcgtgct	cttcatggtc	tatggcaacg	tgcacgtgag	cacagagtcc	aacctgcagg	240
ccaccgagcg	ccgagccgag	ggcctataca	gtcagctcct	agggctcacg	gcctcccagt	300
ccaacttgac	caaggagctc	aacttcacca	cccgcgccaa	ggatgccatc	atgcagatgt	360
ggctgaatgc	tcgccgcgac	ctggaccgca	tcaatgccag	cttcgccag	tgccaggggtg	420
accgggtcat	ctacacgaac	aatcagaggt	acatggctgc	catcatcttg	agtgagaagc	480
aatgcagaga	tcaattcaag	gacatgaaca	agagctgcga	tgcttgcctc	ttcatgctga	540
atcagaaggt	gaagacgctg	gaggtggaga	tagccaagga	gaagaccatt	tgcactaagg	600
ataaggaaa	cgtgctgctg	aacaaacgcg	tggcggagga	acagctgggt	gaatgcgtga	660
aaacccggga	gctgcagcac	caagagcgcc	actggccaag	gagcaactgc	aaaaggtgca	720
agccctctgc	ctgcccctgg	acaaggacaa	gtttgagatg	gaccttcgta	acctgtggag	780
ggactccatt	atcccacgca	gcctggacaa	cctgggttac	aacctctacc	atccccggg	840
ctcggaattg	gctcccatcc	gcagagcctg	gcaccacatg	cccagcctca	tgagctccaa	900
gggtggaggag	ctggccccgga	gcctccgggc	ggatatcgaa	cgctggcccc	gcgagaactc	960
agacctccaa	cgccagaagc	tggaaagccca	gcagggcctg	cgggccagtc	aggaggcgaa	1020
acagaagggt	gagaaggagg	ctcaggcccc	ggaggccaag	ctccaagctg	aatgctcccg	1080
gcagacccag	ctagcgctgg	aggagaaggc	gggtgctgcg	aaggaaacgag	acaacctggc	1140
caaggagctg	gaagagaaga	agagggaggc	ggagcagctc	aggatggagc	tggccatcag	1200
aaactcagcc	ctggacacct	gcataagac	caagtgcag	ccgatgatgc	cagtgtcaag	1260

```

gcccattgggc cctgtcccca acccccagcc catcgaccca gctagcctgg aggagttcaa 1320
gaggaagatc ctggagtccc agaggcccc tgcaggcatc cctgtagccc catccagtgg 1380
ctgaggaggc tccaggcctg aggaccaagg gatggcccga ctcggcggtt tgcggaggat 1440
gcagggatat gctcacagcg cccgacacaa cccctccccg cggcccccac ccaccagggg 1500
ccaccatcag acaactccct gcatgcaaac ccctagtacc ctctcacacc cgcaccgcg 1560
cctcacgac cctcaccag agcacacggc cgcggagatg acgtcacgca agcaacggcg 1620
ctgacgtcac atatcacctg ggtgatggcg tcacgtggcc atgtagacgt cacgaagaga 1680
tatagcgatg gcgctcgtgca gatgcagcac gtcgcacaca gacatgggga acttggcatg 1740
acgtcacacc gagatgcagc aacgacgtca cgggccatgt cgacgtcaca catattaatg 1800
tcacacagac gcggcgatgg catcacacag acggtgatga tgtcacacac agacacagtg 1860
acaacacaca ccatgacaac gacacctata gatatggcac caacatcaca tgcacgcatg 1920
ccctttcaca cacactttct acccaattct cacctagtgt cacgttcccc cgaccctggc 1980
acacggggcca aggtaccac aggatcccat cccctccccg acagccctgg gccccagcac 2040
ctcccctcct ccagcttctt ggccctcccag ccacttctct acccccagt cctggacccg 2100
gaggtgagaa caggaagcca ttcacctcgg ctccttgagc gtgagtgtt ccaggacccc 2160
ctcggggccc tgagccgggg gtgagggtca cctgttgtcg ggaggggagc cactccttct 2220
cccccaactc ccagccctgc ctgtggcccc ttgaaatgtt ggtggcactt aataaatatt 2280
agtaaatcct taaaaaaaaa aaaaaaaaaa aaa 2313

```

```

<210> 7
<211> 389
<212> DNA
<213> Homo sapiens

```

```

<400> 7
gccaaaaaga tggtttcaaa agtaagaatg aaacatttga tccattcagc tttaggctat 60
gccactggat tcatgtctag aaaagatagg ataatttctg taaagaaatg aagaccttgc 120
tatttcaaaa tcagatcctt acagatccag atttcaggaa acaaatacat aggggactaa 180
ctttccttgt tcagattagt ttttctcctt tgcaccagc tatataatat gaggaagtat 240
tgacttttta aaagtgtttt agttttccat ttctttgata tgaaaagtaa ttttctggga 300
gaaccctgag ctattaataa tctatgtggc tagtgcgtat atattggtct gaatttgttc 360
tccttttgtg gtgtccagtg ggtaacatc 389

```

```

<210> 8
<211> 157
<212> DNA
<213> Homo sapiens

```

```

<400> 8
tgctttaaac agctgtgtca aaaactgaca tcagagagta aattgaattt ggtttttag 60
gaagcaggaa gcaagcccac tcaaactgta aatttggcat gagggatcca gtaactttct 120
cctcaatctg tgaactatat gtgagtttga tattttg 157

```

```

<210> 9
<211> 561
<212> DNA
<213> Homo sapiens

```

```

<400> 9
aatagtcaaa acataaacia aagctaatta actggcactg ttgtcacctg agactaagtg 60
gatgttgttg gctgacatac aggtcagacc agcagagaaa gaattctgaa tttcccttgc 120
tgaactgaac tattctgtta catatggttg acaaactctg gtgttatttc ttttctacct 180
accatattta aatttatgag tatcaaccga ggacatagtc aaaccttcga tgatgaacat 240
tcctgatttt ttgcctgatt aatctctgtt gagctctact tgtggtcatt caagatttta 300
tgatgttgaa aggaaaagtg aatatgacct ttaaaaattg tattttgggt gatgatagtc 360
tcaccactat aaaactgtca attattgcct aatgttaaag atatccatca ttgtgattaa 420
ttaaacctat aatgagtatt cttaatggag aattcttaat ggatggatta tcccctgac 480
ttttctttaa aatttctctg cacacacagg acttctcatt ttccaataaa tgggtgtact 540

```

ctgccccaat ttctaggaaa a

561

&lt;210&gt; 10

&lt;211&gt; 1508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 10

```

cacaaacacg agagactcca cgggtctgcct gagcaccgcc agcctcctag gctccagcac 60
tcgcagggtcc attctttctgc acgagcctct ctgtccagat ccataagcac ggtcagctca 120
gggtcgcgga gcagtacgag gacaagtacc agcagcagct cctctgaaca gagactgcta 180
ggatcatcct tctcctccgg gcctgttgct gatggcataa tccgggtgca acccaaactct 240
gagctcaagc caggtgagct taagccactg agcaagggaag atttgggcct gcacgcctac 300
aggtgtgagg actgtggcaa gtgcaaagtgt aaggagtgc cctaccaag gcctctgcca 360
tcagactgga tctgcgacaa gcagtgcctt tgctcggccc agaactgat tgactatggg 420
acttgtgtat gctgtgtgaa aggtctcttc tatcactgtt ctaatgatga tgaggacaac 480
tgtgtctgaca acccatgttc ttgcagccag tctcactgtt gtacacgatg gtcagccatg 540
gggtgtcatgt cctctttttt gccttgttta tgggtgttacc ttccagccaa gggttgcctt 600
aaattgtgcc aggggtgtta tgaccgggtt aacaggcctg gttgccgctg taaaaactca 660
aacacagttt gctgcaaagt tcccactgtc ccccttagga actttgaaaa accaacatag 720
catcattaat caggaatatt acagtaatga ggattttttt tttctttttt taatacacat 780
atgcaaccaa ctaaacagtt ataactcttg cactgttaat agaaagttgg gatagtcttt 840
gctgtttgcg gtgaaatgct ttttgtccat gtgccgtttt aactgatatg cttgttagaa 900
ctcagctaata ggagctcaaa gtatgagata cagaacttgg tgacccatgt attgcataag 960
ctaaagcaac acagacactc ctaggcaaaag tttttgtttg tgaatagtag ttgcaaaact 1020
tgtaaatagg cagatgactt ttttccattg ttttctccag agagaatgtg ctatatTTTT 1080
gtatatacaa taatatTTTgc aactgtgaaa aacaagtggg gccatactac atggcacaga 1140
cacaaaatat tatactaata tgttgtacat tcggaagaat gtgaatcaat cagtatgttt 1200
ttagattgta ttttgcccta cagaaagcct ttattgtgaa actctgattt ccctttggac 1260
ttcatgtata ttgtacagtt acagtaaaat tcaaccttta ttttctaatt ttttcaacat 1320
attgttttagt gtaaagaata tttattttgaa gttttattat tttataaaaa agaataTTTta 1380
ttttaagagg catcttaca atttttgcccc ttttatgagg atgtgatagt tgctgcaaat 1440
gaggggttac agatgcatat gtccaatata aaatagaaaa tatattaacg tttgaaatta 1500
aaaaaaaaa

```

&lt;210&gt; 11

&lt;211&gt; 389

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 11

```

gggcagggtga tcagggcaca catttcccggt ccattgagac agtagcattc ccggcaccca 60
tcgtgccagc tctcctcatt tttatgatga tgaccatcca cgggtgagaca agtgcccgac 120
aggatgggtg gcccgactga agcacaggcc gctctgcact tgcagataag acagccgtga 180
ctgtcctgct ggaaacccaa ggggcagatc ttactgcatg agagctctgg acattttctta 240
cagcgacaga tgtcacagcc gtgcttattc ttcagcaatc caagtggaca atacttgtca 300
cagattatgg gtctgcactt cttgggcctt gggcggcact cacagatctc acagttttgg 360
acctcggccg cgaccacgct gggtagcga

```

&lt;210&gt; 12

&lt;211&gt; 981

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 12

```

tttttttttt ttggattgca aaaatttatt aaaattggag aactgttttt aatcttcttg 60
tgccatgaga ctccatcagg cagtctacaa agaccactgg gaggtgagg atcacttgag 120
cccagaagtt tgaggctgta gtaagcttca aaggccactg cactctagct tgggtgaggc 180

```

```

aagacccttt caagcagtaa gctgcatgct tgcttggtgt ggtcattaaa aaccctagtt 240
taggataaca acatattaat cagggcaaaa tacaaatgtg tgatgcttgt tagtagagta 300
acctcagaat caaaatggaa cggtttttaca gtgatatcat tatatttcat ttggcagaat 360
cattacatca ttggttacac tgaaaatcat cacatgtacc aaaagctgac tcacctagtt 420
taggataaca ggtctgcctg tttgaagatg aaaaataata cccattttaa atttgcccta 480
ctcaatttcc ttctcagtca catttttaact tttaaacagc taatcactcc catctacaga 540
ttaaggtgta tatgccacca aaaccttttg ccaccttaaa aatttccttc aaagttttaa 600
ctaagcctg catttcttca atcatgaatt ctgagtcctt tgcttcttta aaacttgctc 660
cacacagtgt agtcaagccg actctccata cccaagcaag tcatccatgg ataaaaacgt 720
taccaggagc agaaccatta agctggtcca ggcaagttgg actccaccat ttcaacttcc 780
agctttctgt ctaatgcctg tgtgccaatg gcttgagtta ggcttgctct ttaggacttc 840
agtagctatt ctcatccttc cttggggaca caactgtcca taaggtgcta tccagagcca 900
cactgcatct gcacccagca ccatacctca caggagtcca ctcccacgag ccgcctgtat 960
ataagagttc ttttgatgac g                                     981

```

<210> 13

<211> 401

<212> DNA

<213> Homo sapiens

<400> 13

```

ataactacag cttcagcaga caactaaaga gactgcatta aggtgatttc tctggctata 60
aagagagccc ggccgcagag catgtgactg ctgggacctc tgggataggc aacactgccc 120
tctctcccc agagcgaccc cccgggcagg tggggccca aggaatgacc cagcaactgc 180
tccctaccca gcacactctc tttactgcca cctgcaatta tgctgtgaag atgactgggt 240
gtggtcatca cgattcagag aaatcaagat ctatgaccat tttaggcaaa gagagaaact 300
tggagaattg ctgaggacta ctgaaccttg ttttgctttt ttaaaaaata ctaaatcctc 360
acttcagcat atttagttgt cattaaaatt aagctgatat t                                     401

```

<210> 14

<211> 1002

<212> DNA

<213> Homo sapiens

<400> 14

```

gacaatataa aaagtggaaa caagcataaa ttgcagacat aaaataatct tctggtagaa 60
acagttgtgg agaacagggt gagtagagca acaacaacaa aagcttatgc agtcaccttc 120
tttgaaaatg ttaaatataa gtccattctt ctttgtccag ctgggttttag ctagaggtag 180
ccaattactt ctcttaaggt ccatggcatt cgccaggatt ctataaaagc caagttaact 240
gaagtaaata tctggggccc atcgaccccc cactaagtac tttgtcacca tgttgatatc 300
taaaagtcat ttttactgt ttgactcaga atttgggact tcagagtcaa acttcattgc 360
ttactccaaa ccagttttaa ttccccactt ttttaagtag gcttagcttt gagtgatttt 420
tggtctataac cgaaatgtaa atccaccttc aaacaacaaa gtttgacaag actgaaatgt 480
tactgaaaac aatggtgcca tatgctccaa agacatttcc ccaagataac tgccaaagag 540
tttttgagga ggacaatgat catttattat gtaggagcct tgatatctct gcaaaataga 600
attaatacag ctcaaagga gtagtaacca agcttttctg ccaggaagt aacaaacatc 660
actacgaaca tgagagtaca agaggaaact ttcataatgc attttttcat tcatacatc 720
attcaataaaa cattagccaa gctaagtcc caagccactg tgccaggat taacaatata 780
acaacaataa aagacacagt cttcctctc aaggtgttca gtctagtagg gaagatgatt 840
attcattaaa atttttgggt catcagaatc atgaggagct tgtcaaaaat gtaaattcct 900
gcctatgttc tcagatttc ttggttaggtc aggagtggga acccaaatc aattctttta 960
acaaacacta aaggtgattc taacacaggc ggtgtgagga cc                                     1002

```

<210> 15

<211> 280

<212> DNA

<213> Homo sapiens

&lt;400&gt; 15

```

cgaggtgggc caccctgtgc tgggtctgaga tttttaaatg aggattacat tatectatct 60
ataatattcc tattctaatc tattgtattc ttacaattaa atgtatcaaa taattcttaa 120
aacattattt agaaacaaac tgcctaatac cttataagac taaaaaaatc accaagatga 180
aactgtatta tgactctcaa tatttaaaca tttaaaaaaa tgtagtggtt tgtaagcac 240
caatcttaac tatttcacct gcccgggcgg ccgctcgagg                280

```

&lt;210&gt; 16

&lt;211&gt; 2041

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 16

```

ccccccgcag aactcccccc tggaaatagga tttttaaaac ccttgacaat tagaaatcct 60
atagagggtta gcatttttta ggtaaaaata tgggtgcccc tacagggatc atgcaacttc 120
cttaaaacca attcagcaca tatgtataaa gaaccctttt taaaaacatt tgtacttgaa 180
atacagacac agtgatgctg aagacactaa acaaaaactg aaaagtacta taccttgata 240
aattttgtta ttgccttctt tagagacttt ataatctcta gttgattttc aaggacttga 300
atttaataat ggggtaatta cacaagacgt aaaggatttt taaaaacaa gtattttttt 360
ttacctctag catcaattct tttataaaga atgctaaata aattacattt tttgttcagt 420
aaaactgaag atagaccatt taaatgcttc taccaaattt aacgcagctt aattagggac 480
caggtagcata ttttcttctg aacatttttg gtcaagcatg tctaaccata aaagcaaag 540
gaattttaag aggtagattt tttttccatg atgcattttg ttaataaatg tgtcaagaaa 600
ataaaaacaa gcactgagtg tgttctcttg aagtataagg gtctaataaa aaataaaaga 660
tagatatttg ttatagtctg acatttttaac agtcatagta ttagacgttt cgtgaccagt 720
gcattttgga ctctctcagg atcaaaatac gagtctgcca actgtattaa atcctcctcc 780
acccccctca ccagttgggtc cacagcttcc tgggtgggtc ttgtcatcaa atccattggg 840
ccgaaatgaa catgaagcag atgcagcttg gagggcccg gctcgagcat tcaactcttg 900
ttcctgtaaa tatagtttat tgtcttttgt tatagcatcc ataagttctt tctgtagagg 960
tgggtctcca tttatccaga gtccactggt tgggttatta ccacttaaac cattagtact 1020
atgctgtttt ttatacaaaa gcacataagc tgtgtccttt ggaaacctgc tcgtaatttt 1080
ctggactgac tgaatgaag taaatgtcac tctactgtca ttaaataaaa acccattctt 1140
ttgacatttc cttattttcc aaatcctggt caaaaactgc actgggacta tctctcccta 1200
gtaaatgact ctgggaggat gctaatagcca gagcctcaga ctgggtggta atctgatatg 1260
aagagtctgt acttgtgata tttctggcat aagaatagta atgcccactt tcagaggata 1320
taccagagtg aaccacaacg gaacttaata gatagggcac caattttgtg caggaagctt 1380
catcagtcct tgaaggcttt aatttttttag caaggttctc actaagatca gtgaagtcaa 1440
catctacaga ccaactttct gacaatgaag agaaagaagt aattcttcta actggcaact 1500
ccaaaaccag tggccagtga tacattgtct aaaattttcc ttctcacatg atacttctga 1560
tcatatgaaa atctcaggag agtaagaata aggtattcag gttcctccgt gatttgcata 1620
gttttctcag cattttgcag agaggcacag ttttcacaat aatattggtt atcaccagta 1680
agaatctctg gagcccaaaa aataatttag taagtacgtt actgaagggt taggttcacc 1740
tcccggtttc tgaggtacat ctttattaac aagaatcttg ttagattcgt tagggacaga 1800
agtgttttca gaacagtaaa actcattagg aggactgcct atgggttttt cattcacaag 1860
tgagtcacag atgaaggcag ctgttggttg attataaact actggctctt ctgaaggacc 1920
gggtacagac gcttgcatta gaccaccatc ttgtatactg ggtgatgatg ctggatcttg 1980
gacagacatg ttttcctaaag aagaggaagc acaaaacgca agcgaaagat ctgtaaaggc 2040
t                                                    2041

```

&lt;210&gt; 17

&lt;211&gt; 235

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 17

```

cgccccgggc aggtgtcagg ggttccaaac cagcctgggg aaacacagcg tagaccctc 60
acctctacaa ataaaaaatt aaaaaattag ccagggtgtg cagcgaacaa ctgtagtctc 120
agatactcag gagactgagc tggaaaggat cacttgagcc caagaagttc aaggttacag 180

```

tgggccacga tcatgtcatt acactccagc ttgggtgaca aaatgagact gtcta 235

<210> 18

<211> 2732

<212> DNA

<213> Homo sapiens

<400> 18

```

gtgtggagtt tcagctgcta ttgactataa gagctatgga acagaaaaag cttgctggct 60
tcatgttgat aactacttta tatggagctt cattggacct gttaccttca ttattctgct 120
aaatattatc ttcttgggtga tcacattgtg caaaatgggtg aagcattcaa acactttgaa 180
accagattct agcaggttgg aaaacattaa gtcttgggtg cttggcgctt tcgctcttct 240
gtgtcttctt ggcctcacct ggtccttttg gttgcttttt attaatgagg agactattgt 300
gatggcatat ctcttcacta tatttaaatg tttccaggga gtgttcattt tcatctttca 360
ctgtgctctc caaaagaaaag tacgaaaaga atatggcaag tgcttcagac actcatactg 420
ctgtggaggc ctcccaactg agagtcccca cagttcagtg aaggcatcaa ccaccagaac 480
cagtgtctcg tattctctcg gcacacagag tctataaga agaattgtga atgatactgt 540
gagaaaacaa tcagaatctt cttttatctc aggtgacatc aatagcactt caacacttaa 600
tcaaggtggc ataaatctta atatattatt acaggactga catcacatgg tctgagagcc 660
catcttcaag atttatatca tttagaggac attcactgaa caatgccagg gatacaagtg 720
ccatggatac tctaccgcta aatggtaatt ttaacaacag ctactcgctg cacaaggggtg 780
actataatga cagcgtgcaa gttgtggact gtggactaag tctgaatgat actgcttttg 840
agaaaatgat catttcagaa ttagtgcaca acaacttacg gggcagcagc aagactcaca 900
acctcgagct cactgtacca gtcaaacctg tgattggagg tagcagcagt gaagatgatg 960
ctattgtggc agatgcttca tctttaatgc acagcgacaa ccagggtctg gagctccatc 1020
acaaagaact cgaggcacca cttattcctc agcggactca ctcccttctg taccaacccc 1080
agaagaaagt gaagtccgag ggaactgaca gctatgtctc ccaactgaca gcagaggctg 1140
aagatcacct acagtcccc aacagagact ctctttatac aagcatgccc aatcttagag 1200
actctcccta tccggagagc agccctgaca tggagaaga cctctctccc tccaggagga 1260
gtgagaatga ggacatttac tataaaagca tgccaaatct tggagctggc catcagcttc 1320
agatgtgcta ccagatcagc aggggcaata gtgatggtta tataatcccc attaacaaaag 1380
aagggtgtat tccagaagga gatgttagag aaggacaaat gcagctgggtt acaagtcttt 1440
aatcatacag ctaaggaatt ccaagggcca catgcgagta ttaataaata aagacaccat 1500
tggcctgacg cagctccctc aaactctgct tgaagagatg actcttgacc tgtggttctc 1560
tgggtgtaaaa aagatgactg aaccttgtag ttctgtgaat ttttataaaa catacaaaaa 1620
ctttgtatat acacagagta tactaaagtg aattatttgt tacaagaaa agagatgcca 1680
gccaggtatt ttaagattct gctgctgttt agagaaattg tgaaacaagc aaaacaaaac 1740
tttccagcca ttttactgca gcagtctgtg aactaaattt gtaaataatg ctgcaccatt 1800
tttgtaggcc tgcattgtat tatatacaag acgtaggctt taaaatcctg tgggacaaat 1860
ttactgtacc ttactattcc tgacaagact tggaaaagca ggagagatat tctgcatcag 1920
tttgagttc actgcaaact ttttacatta aggcaaagat tgaaaacatg ctttaaccact 1980
agcaatcaag ccacaggcct tatttcatat gtttctcaa ctgtacaatg aactattctc 2040
atgaaaaatg gctaaagaaa ttatatattg ttctattgct agagtgaaga aaatattgtg 2100
gtgtccaact gaaatataat tgtcattaaa ataattttta agagtgaaga aaatattgtg 2160
aaaagctctt ggttgacat gttatgaaat gttttttctt acactttgtc atggtaagtt 2220
ctactcattt tcaactcttt tccactgtat acagtgttct gctttgacaa agttagtctt 2280
tattacttac atttaaatct cttattgcca aaagaacgtg ttttatgggg agaaacaaac 2340
tctttgaagc cagttatgtc atgccttgca caaaagtgat gaaatctaga aaagattgtg 2400
tgtcaccctt gtttattctt gaacagaggg caaagagggc actgggcact tctcacaac 2460
tttctagtga acaaaagggt cctattcttt tttaaaaaaa taaaataaaa cataaatatt 2520
actcttccat attcttctg cctatatatta gtaatttaatt tattttatga taaagttcta 2580
atgaaatgta aattgtttca gcaaaattct gctttttttt catccctttg tgtaaacctg 2640
ttaataatga gcccatcact aatatccagt gtaaaagtta acacggtttg acagtaaata 2700
aatgtgaatt ttttcaagtt aaaaaaaaaa aa 2732

```

<210> 19

<211> 276



<212> DNA  
 <213> Homo sapiens

<400> 19  
 ctccctaagt gatttttaaaa taaattggat aaacatatga tataaagtgg gtacttttaga 60  
 aaccgccttt gcatattttt tatgtacaaa tctttgtata caattccgat gttccttata 120  
 tattccctat atagcaaacc aaaaccagga cctcccaact gcatgcctca agtcctctgtg 180  
 gagcactctg gcaactggat ggccctactt gctttctgac aaaatagctg gaaaggagga 240  
 gggaccaatt aaatacctcg gccgcgacca cgctgg 276

<210> 20  
 <211> 2361  
 <212> DNA  
 <213> Homo sapiens

<400> 20  
 attgtaccag ccttgatgaa cgtggggccct gcttcgcttt tgagggccat aagctcattg 60  
 cccactgggt tagaggctac cttatcattg tctcccgtga ccggaagggt tctcccaagt 120  
 cagagtttac cagcagggat tcacagagct ccgacaagca gattctaaac atctatgacc 180  
 tgtgcaacaa gtccatagcc tatagcaccg tctttgagga tgtagtggat gtgcttgctg 240  
 agtggggctc cctgtacgtg ctgacgcggg atggggcgggt ccacgcactg caggagaagg 300  
 acacacagac caaactggag atgctgttta agaagaacct atttgagatg gcgattaacc 360  
 ttgccaagag ccagcatctg gacagtgatg ggctggccca gattttcatg cagtatggag 420  
 accatctcta cagcaagggc aaccacgatg ggctgtcca gcaatatatc cgaaccattg 480  
 gaaagtggga gccatcctac gtgatccgca agtttctgga tgcccagcgc attcacaacc 540  
 tgactgccta cctgcagacc ctgcaccgac aatccctggc caatgccgac cataccacc 600  
 tgctcctcaa ctgctatacc aagctcaagg acagctcgaa gctggaggag ttcatacaga 660  
 aaaagagtga gagtgaagtc cactttgatg tggagacagc catcaagggt ctcggcgagg 720  
 ctggctacta ctcccatgcc ctgtatctgg cggagaacca tgcacatcat gagggtgacc 780  
 tgaagatcca gctagaagac attaagaatt atcaggaagc ccttcgatac atcggaagc 840  
 tgcccttttga gcaggcagag agcaacatga agcgctacgg caagatcctc atgcaccaca 900  
 taccagagca gacaactcag ttgctgaagg gactttgtac tgattatcgg ccagcctcg 960  
 aaggccgca cgataggag gccccaggct gcagggccaa ctctgaggag ttcataccca 1020  
 tctttgccaa taaccgcga gagctgaaag ccttcctaga gcacatgagt gaagtgcagc 1080  
 cagactcacc ccaggggatc tacgacacac tccttgagct gcgactgcag aactgggccc 1140  
 acgagaagga tccacaggtc aaagagaagc ttcacgcaga ggccatttcc ctgctgaaga 1200  
 gtggtcgctt ctgacgagtc tttgacaagg ccctggctct gtgccagatg cagacttcc 1260  
 aggatggtgt cctttacctt tatgagcagg ggaagctgtt ccagcagatc atgcactacc 1320  
 acatgcagca cgagcagtac cggcagggtc tcagcgtgtg tgagcgccat ggggagcagg 1380  
 acccctcctt gtgggagcag gccctcagct acttcgctcg caaggaggag gactgcaagg 1440  
 agtatgtggc agctgtcctc aagcatatcg agaacaagaa cctcatgcca cctcttctag 1500  
 tgggtgcagac cctggccac aactccacag ccacactctc cgtcatcagg gactacctgg 1560  
 tccaaaaact acagaaacag agccagcaga ttgcacagga tgagctgcgg gtgcccgggt 1620  
 accgagagga gaccaccgt atccgccagg agatccaaga gctcaaggcc agtcctaaga 1680  
 ttttccaaaa gaccaagtgc agcatctgta acagtgcctt ggagttgccc tcagtccact 1740  
 tcctgtgtgg ccactccttc caccaacact gctttgagag ttactcgga agtgatgctg 1800  
 actgccccac ctgcctccct gaaaaccgga aggtcatgga tatgatccgg gccaggaac 1860  
 agaaacgaga tctccatgat caattccagc atcagctcaa gtgctccaat gacagctttt 1920  
 ctgtgattgc tgactacttt ggcagagggt ttttcaacaa attgactctg ctgaccgacc 1980  
 ctcccacagc cagactgacc tccagcctgg aggtggggt gcaacgcgac ctactcatgc 2040  
 actccaggag gggcacttaa gcagcctgga ggaagatgtg ggcaacagt ggagccaag 2100  
 agaacagaca caatgggacc tgggcggcg ttacacagaa ggctggctga catgccagg 2160  
 gctccactct catctaattg cacagccctc acaagactaa agcggaaact tttcttttcc 2220  
 ctggccttcc ttaattttta gtcaagcttg gcaatccct cctctttaac taggcagggt 2280  
 ttagaatcat ttccagatta atggggggga aggggaacct caggcaaacc tcctgaagtt 2340  
 ttggaaaaaa aagctgggtt c 2361

<210> 21  
 <211> 179  
 <212> DNA  
 <213> Homo sapiens

<400> 21  
 aggtgttaga tgctcttgaa aaagaaactg catctaagct gtcagaaatg gattctttta 60  
 acaatcaact aaaggaactg agagaaacct acaacacaca gcagttagcc cttgaacagc 120  
 ttataagat caacgtgaca agttgaagga aattgaaagg aaaaaattag aactaatgc 179

<210> 22  
 <211> 905  
 <212> DNA  
 <213> Homo sapiens

<400> 22  
 tttttttttt ttctttaacc gtgtggtctt tatttcagtg ccagtgttac agatacaaca 60  
 caaatgttcc agttagaagg aattcaaacg gaatgccaag gtccaagcca ggctcaagaa 120  
 ataaaaaggg aggtttggag taatagataa gatgactcca atactcactc ttccctaaggg 180  
 caaaggtact ttgtatagag agtctgatct ttgaaactgg tgaactcctc ttccacccat 240  
 taccatagtt caaacaggca agttatgggc ttaggagcac tttaaaattt gtggtgggaa 300  
 tagggtcatt aataactatg aatatactct ttagaagggt accattttgc actttaagg 360  
 gaatcaattt tgaatatcat ggagactatt catgactaca gctaaagaat ggcgagaaag 420  
 gggagctgga agagccttgg aagtttctat tacaatataga gcaccatata cttcatgcca 480  
 aatctcaaca aaagctcttt ttaactccat ctgtccagtg tttacaaata aactcgcaag 540  
 gtctgaccag ttcttggtaa caaacataca tgtgtgtgtc tgtgtgtata cagcaatgca 600  
 cagaaaaggc taccaggagc ctaatgcctc tttcaaacat tgggggaacc agtagaaaaa 660  
 ggcagggtct cctaattgtc attattacat ttccattccg aatgccagat gttaaaagt 720  
 cctgaagatg gtaaccagc tagtgaggaa taaatacccc accttgccca gtccacagag 780  
 aaacaacagt agaaagaagg ggcaactctt tgctgcagag acaaagttag tgttttttcg 840  
 ccatggattg cagtcctctc ctccagacca gctgcttatt tcctcagggg cccagggaat 900  
 gttga 905

<210> 23  
 <211> 2134  
 <212> DNA  
 <213> Homo sapiens

<400> 23  
 ggtctcttct ttcttttttt tttttccaaa agtggtcttt tatttctagt aacatatatt 60  
 gtataaatac tctattttat atgcacttcc acaaaagcga tataatttaa aagttttttt 120  
 cattagaaat aaatgtataa aaataaatat gttattatag gcatttatta ctaactatag 180  
 tccttcttgg aaggacaccc caaaccaata cttataaagt acatgtaatt tatagtaaca 240  
 tattttacta tatacatatg gaaaaaatca tattctcaca gaagagctga acagacattc 300  
 accaggatac gactgttgga ccagctgctg gagatggacc tgctaccctc cagcagcctc 360  
 cccaccacaa gacaagtgat ctcaatgtcc ccaaacctgt gggaccctgt tctacacacc 420  
 tcatttttgt tccggcggtt catcctcctt gtgtgattgt actgattttc atgagacaca 480  
 agttacttct ttacatccat attcccaaag cagggttaca tggtaggaaa gaaaggaagt 540  
 tggagggtact aagctcattg tgtctcctct agcttttacc agcatctaata gcttctactgc 600  
 tttttttcca ttgtagactt taatgcactt gaataaatac atggagttgt tttttctca 660  
 aaatgaatta cacaaataaa gactgagatg gtccaaaaaa ggaaagagga agccatttgc 720  
 gttatttcac gttgctgagc ctttctctca tgttgaacaa tctgaagttt taattctcgg 780  
 tagaaataat gtataaacat tctctgaaac catagcagcc ataaacagtg ctggtcaaag 840  
 atcctatttg tactcctttc tccccccatt gttagttagg taaagtaaaa caggtcttag 900  
 taaaatctca cttttctcct acttttcatt tcccaacccc catgatacta agtatttgat 960  
 aagtaccagg aaacaggggt tgtaatatgt ctaacttttt ttgacaattg ctttgttttt 1020  
 tctaaacttg taatagatgt aacaaaagaa ataataataa taatgcccgg ggctttatta 1080  
 tgctatatca ctgctcagag gtttaataatc ctactaact atcctatcaa atttgcaact 1140

```

ggcagtttac tctgatgatt caactccttt tctatctacc cccataatcc caccttactg 1200
atacacctca ctgggttactg gcaagatacg ctggatccct ccagccttct tgctttccct 1260
gcaccagccc ttcctcactt tgccttgccc tcaaagctaa caccacttaa accacttaac 1320
tgcattctgc cattgtgcaa aagtctatga aatgttttagg tttctttaaa ggatcacagc 1380
tctcatgaga taacaccctt ccatcatggg acagacactt caagcttctt tttttgtaac 1440
ccttcccaca ggtcttagaa catgatgacc actccccag ctgccactgg gggcagggat 1500
ggtctgcaca aggtctgggt ctggctgggt tcacttcctt tgcacactcg gaagcaggct 1560
gtccattaat gtctcggcat tctaccagtc ttctctgcc aaccaattca catgacttag 1620
aacattcgcc ccactcttca atgacccatg ctgaaaaagt ggggatagca ttgaaagatt 1680
ccttcttctt ctttacgaag taggtgtatt taatttttagg tcgaagggca ttgccacag 1740
taagaacctg gatggtcaag ggctctttga gagggctaaa gctgcgaatt ctttccaatg 1800
ccgcagagga gccgctgtac ctcaagacaa cacctttgta cataatgtct tgctctaagg 1860
tggaacaaagt gtagtcacca ttaagaatat atgtgccatc agcagctttg atggcaagaa 1920
agctgccatt gttcctggat cccctctggt tccgctgttt cacttcgatg ttggtggctc 1980
cagttggaat tgtgatgata tcatgatatc caggttttgc actagtaact gatcctgata 2040
tttttttaca agtagatcca tttccccgc aaacaccaca tttatcaaac ttctttttgg 2100
agtctatgat gcgatcaca ccagctttta caca 2134

```

<210> 24

<211> 1626

<212> DNA

<213> Homo sapiens

<400> 24

```

ggacaatttc tagaatctat agtagtatca ggatatattt tgcttttaaaa tatatttttg 60
ttattttgaa tacagacatt ggctccaaat tttcatcttt gcacaatagt atgacttttc 120
actagaactt ctcaacattt gggaactttg caaatatgag catcatatgt gttaaggctg 180
tatcatttaa tgctatgaga tacattgttt tctccctatg ccaaacaggt gaacaaacgt 240
agttgttttt tactgatact aaatgttggc tacctgtgat tttatagtat gcacatgtca 300
gaaaaaggca agacaaatgg cctctgttac tgaatacttc ggcaaactta ttgggtcttc 360
attttctgac agacaggatt tgactcaata tttgtagagc ttgcgtagaa tggattacat 420
ggtagtgatg cactggtaga aatgggtttt agttattgac tcagaattca tctcaggatg 480
aatcttttat gtctttttat tgtaagcata tctgaattta ctttataaag atgggttttag 540
aaagctttgt ctaaaaattt ggcctaggaa tggtaacctc attttcagtt gccaaagggg 600
agaaaaataa tatgtgtgtt gttatgttta tgtaacata ttattaggta ctatctatga 660
atgtatttaa atatttttca tattctgtga caagcattta taatttgcaa caagtggagt 720
ccatttagcc cagtgggaaa gtcttggaac tcaggttacc ctgaaggat atgctggcag 780
ccatctcttt gatctgtgct taaactgtaa tttatagacc agctaaatcc ctaacttggg 840
tctggaatgc attagttatg ccttgtacca ttcccagaat ttcaggggca tcgtgggttt 900
ggtctagtga ttgaaaacac aagaacagag agatccagct gaaaaagagt gatcctcaat 960
atcctaacta actggtcctc aactcaagca gagtttcttc actctggcac tgtgatcatg 1020
aaacttagta gaggggattg tgtgtatttt atacaaattt aatacaatgt cttacattga 1080
taaaattctt aaagagcaaa actgcatttt atttctgcat ccacattcca atcatattag 1140
aactaagata tttatctatg aagatataaa tgggtgcagag agactttcat ctgtggattg 1200
cgttgtttct tagggttcct agcactgatg cctgcacaag catgtgatat gtgaaataaa 1260
atggattctt ctatagctaa atgagttccc tctggggaga gttctggtac tgcaatcaca 1320
atgccagatg gtgtttatgg gctatttgtg taagtaagtg gtaagatgct atgaagtaag 1380
tgtgtttgtt ttcactttat ggaaactcct gatgcatgtg cttttgtatg gaataaattt 1440
tgggtgcaata tgatgtcatt caactttgca ttgaattgaa ttttggttgt atttatatgt 1500
attatacctg tcacgcttct agttgcttca accattttat aaccattttt gtacataatt 1560
tacttgaaaa tatttttaaa ggaaatttaa ataaacattt gatagtttac ataataaaaa 1620
aaaaaa 1626

```

<210> 25

<211> 1420

<212> DNA

<213> Homo sapiens

&lt;400&gt; 25

```

gttcagcatt gtttctgctt ctgaaatctg tatagtacac tggtttgtaa tcattatgtc 60
ttcattgaaa tccttgctac ttctcttctt cctcaatgaa agacacgaga gacaagagcg 120
acacaagctt aagaaaaaacg agcaaggaag agtatcttca ttattctcat tttctctgag 180
ttggaaacaa aaacatgaag gactccaact agaagacaga tatttacatt taaatagatt 240
agtgggaaaa ctttaagagt ttccacatat tagttttcat tttttgagtc aagagactgc 300
tccttgactt gggagacact agtagtatat gtttgtaatg ttactttaaa attatctttt 360
tattttataa ggcccataaa tactgggttaa actctgttaa aagtgggcct tctatcttgg 420
atggttttcac tgccatcagc catgctgata tattagaaat ggcaccccta tctacttact 480
ttaatgctta aaattataca taaaatgctt tatttagaaa acctacatga tacagtgggtg 540
tcagccttgc catgtatcag tttcacttga aatttgagac caattaaatt tcaactgttt 600
agggtggaga aagagggtact ggaaaacatg cagatgagga tatcttttat gtgcaacagt 660
atcctttgca tgggaggaga gttactcttg aaaggcaggc agcttaagtg gacaatgttt 720
tgtatatagt tgagaatttt acgacacttt taaaaattgt gtaattgtta aatgtccagt 780
tttgctctgt tttgcctgaa gtttttagtat ttgttttcta ggtggacctc tgaaaaccaa 840
accagtacct ggggagggtta gatgtgtgtt tcaggcttgg agtgtatgag tggttttgct 900
tgtattttcc tccagagatt ttgaacttta ataattgcgt gtgtgttttt ttttttttaa 960
gtggccttgt ttttttttct caagtaaaat tgtgaacata tttcctttat aggggcaggg 1020
catgagttag ggagactgaa gagtattgta gactgtacat gtgccttctt aatgtgtttc 1080
tcgacacatt ttttttcagt aacttgaaaa ttcaaaaggg acatttggtt aggttactgt 1140
acatcaatct atgcataaat ggcagcttgt tttcttgagc cactgtctaa attttgtttt 1200
tatagaaatt ttttatactg attggttcat agatggtcag ttttgtacac agactgaaca 1260
atacagcact ttgccaaaaa tgagtgtagc attgtttaaa cattgtgtgt taacacctgt 1320
tctttgtaat tgggttgttg tgcattttgc actacctgga gttacagttt tcaatctgtc 1380
agtaataaaa gtgtccttta acttcaaaaa aaaaaaaaaa 1420

```

&lt;210&gt; 26

&lt;211&gt; 689

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 26

```

aaacaaacaa aaaaaaagtt agtactgtat atgtaaatac tagcttttca atgtgctata 60
caaacaatta tagcacatcc ttctttttac tctgtctcac ctcttttagg tgagtacttc 120
cttaataaag tgctaaacat acatatacgg aacttgaaag ctttggttag ccttgacctt 180
ggtaatcagc ctagttttaca ctgtttccag ggagtagttg aattactata aaccattagc 240
cacttgcttc tgcaccattt atcacaccag gacagggtct ctcaacctgg gcgctactgt 300
catttggggc caggtgattc ttcttgcaa gggctgtcct gtacctgcc gggcgggccg 360
tcgaagcgtg gtcgcggccg aggtactgaa aggaccaagg agctctggct gccctcagga 420
attccaaatg accgaaggaa caaagcttca gggctctggg tgggtgtctc cactattcag 480
gaggtggctg gaggtaacgc agcttcattt cgtccagtc tttccagtat ttaaagttgt 540
tgtcaagatg ctgcattaaa tcaggcaggt ctacaaaggc atcccaagca tcaaacatgt 600
ctgtgatgaa gtaatcaatg aaacaccgga acctccgacc acctcctgaa tagtgggaga 660
cacaccaga gcctgaagtt tgtccttcg

```

&lt;210&gt; 27

&lt;211&gt; 471

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 27

```

tcccagcggc atgaagtttg agattggcca ggccctgtac ctgggcttca tctccttcgt 60
ccctctcgct cattggtggc accctgcttt gcctgtcctg ccaggacgag gcacctaca 120
agccctaacc caggccccgc ccagggccac cagcaccact gcaaacaccg cacctgccta 180
ccagccacca gctgcctaca aagacaatcg gggccctcca gtgacctcgg ccaccacagc 240
gggtacaggc tgaacgacta cgtgtgagtc cccacagcct gcttctcccc tgggctgctg 300
tgggctggtt cccggcggga ctgtcaatgg aggcaggggt tccagcacia agtttacttc 360
tgggcaattt ttgtatccaa ggaaataatg tgaatgcgag gaaatgtctt tagagcacag 420

```

ggacagaggg ggaaataaga ggaggagaaa gctctctata ccaaagactg a

471

<210> 28

<211> 929

<212> DNA

<213> Homo sapiens

<400> 28

```

ggtgaactca gtgcattggg ccaatgggtc gacacaggct ctgccagcca caaccatcct 60
gctgcttctg acggtttggc tgctgggtgg ctttcccttc actgtcattg gaggcattct 120
tgggaagaac aacgccagcc cctttgatgc accctgtcgc accaagaaca tcgcccgga 180
gattccaccc cagccctggt acaagtctac tgtcatccac atgactgttg gaggttcct 240
gcctttcagt gccatctctg tggagctgta ctacatcttt gccacagtat ggggtcggga 300
gcagtacact ttgtacggca tcctcttctt tgtcttcgcc atcctgctga gtgtgggggc 360
ttgcatctcc attgcactca cctacttcca gttgtctggg gaggattacc gctgggtgtg 420
gogatctgtg ctgagtgttg gctccaccgg cctcttcac ttctctact cagttttcta 480
ttatgcccg cgctccaaca tgtctggggc agtacagaca gtagagttct tcggctactc 540
cttactcact ggttatgtct tcttctcat gctgggcacc atctcctttt tttcttccct 600
aaagtccatc cgggtatatct atgttaacct caagatggac tgagtctgt atggcagaac 660
tattgctgtt ctctcccttt cttcatgccc tgttgaactc tcctaccagc ttctcttctg 720
attgactgaa ttgtgtgatg gcattgttgc cttccctttt tccctttggg cattccttcc 780
ccagagaggg cctggaaatt ataaatctct atcacataag gattatatat ttgaactttt 840
taagttgcct ttagtttttg tcctgatttt tctttttaca attacaaaaa taaaatttat 900
taagaaaaag aaaaaaaaaa aaaaaaaaaa

```

<210> 29

<211> 1775

<212> DNA

<213> Homo sapiens

<400> 29

```

gaacgtgatg ggaacttttg gaggatgtct gagaaaaatgt ccgaagggat tttggccaac 60
accagaaaaac gccaatgtcc taggaattcc ctcccaaat gcttcccaa aaattactca 120
ttgacaattc aaattgcact tggctggcgg cagcccgggc ggccttcagt ccgtgtgggg 180
cgcccgctg gccttctcct cgtaggactc ccaaaactcg ttcactctgc gtttatccac 240
aggataaagc caccgctggg acaggtagac cagaaacacc acgtcgtccc ggaagcaggc 300
cagccggtga gacgtgggca tggatgatga gaaggcaaag acgtcatcaa tgaaggtgtt 360
gaaagccttg taggtgaagg cttccagggg cagatgtgcc actgacttca acttgtagtt 420
caciaagagc tggggcagca tgaagaggaa accaaaggca tagaccccg tgacgaagct 480
gttgattaac caggagtacc agctcttata tttgatattc aggagtgaat agacagcacc 540
cccagacag agagggtaca gcaggtatga caagtacttc atggcctgag tatcgactc 600
ctcggttttc ctctcagatt cgctgtaagt gccaaactga aattcgggca tcaggcctct 660
ccaaaaaata gtcattctca atgccttctt cactttccac agctcaatgg cggtccaac 720
acccgccggg accagcacca gcaggctcgt ctgctcgtcc agcaggaaca gaaagatgac 780
cacggtgctg aagcagcgcc agagcactgc cttgggtggac atgccgatca tgctcttctt 840
cttcttccag aaactgatgt cttttttaa ggccaggaaa tcaaagagaa gatggaacgc 900
tgcgacaaag aaggtcagcg ccaggaagta taagttggta tctacaaaaa ttcctttcac 960
ctcatcagca tcttctctg aaaaccgaa ctgctgcagg gagtacacgg cgtcctgcat 1020
gtggatccag aagcgcagcc gcccagtgga gacctgtcg taggacacgg tgaggggcag 1080
ctcgggtggt gagcggttta tgaccatcag gtccttcacg cggttgctga gctggtcgat 1140
gaacaggatg ggcaggtaat gcacggtttt cccagctgg atcatcttca tgtaccgatg 1200
cacatcggca ggcaggagg acccgtaaaa gacaaagtgt tccgccatca cgttcagcgc 1260
cagccgcggt cgccagtggg acactggctc atccagggca ctgctgggt tcttctccgc 1320
ctcgatctgc tgtgtatcag actccccggt gagcagggtt atttcttctg gcttggggac 1380
catgtaggtg gtcagaggac tgaccaggtg cacctgcttc ccgtcgtgcc acggcaggac 1440
cccagcgtga tggaggaaga tgtaggcata cagcgtccca ttgtttctcg ttttctttgg 1500
tacagaaaca ttaactgtcc tttcaattt ggaactccaca tcaaagtctt ccacattcaa 1560
gaccaggtcg atgttgttct cagcaccag gtgggacctc gtcgtggtgt acacgctcag 1620

```

ctgcagcttg	ggccgcccgcg	ccaggtaggg	ctggatgcag	ttggcgtcgc	cggagcacgg	1680
gcggtgtag	acgatgccgt	acatgaccca	gcaggtgtgc	accacgtaga	ccacgaacac	1740
gcccaccacc	aagctggtga	aggagctgcg	gcccc			1775

&lt;210&gt; 30

&lt;211&gt; 1546

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 30

aaaataagta	ggaatgggca	gtgggtatcc	acattcacta	caccttttcc	atttgcta	60
aaggccctgc	caggctggga	gggaattgtc	cctgcctgct	tctggagaaa	gaagatattg	120
acaccatcta	cgggcaccat	ggaactgctt	caagtgacca	ttctttttct	tctgcccagt	180
atttgcagca	gtaacagcac	aggtgtttta	gaggcagcta	ataattcact	tgttggtact	240
acaacaaaac	catctataac	aacaccaaac	acagaatcat	tacagaaaaa	tgttgtcaca	300
ccaacaactg	gaacaactcc	taaaggaaca	atcaccaatg	aattacttaa	aatgtctctg	360
atgtcaacag	ctactttttt	aacaagtaaa	gatgaaggat	tgaaagccac	aaccactgat	420
gtcaggaaga	atgactccat	catttcaaac	gtaacagtaa	caagtgttac	acttccaaat	480
gctgtttcaa	cattacaaaag	ttccaaaacc	aagactgaaa	ctcagagtcc	aattaaaaca	540
acagaaatac	caggtagtgt	tctacaacca	gatgcatcac	cttctaaaac	tggtacatta	600
acctcaatac	cagttacaat	tccagaaaac	acctcacagt	ctcaagtaat	aggcactgag	660
ggtggaaaaa	atgcaagcac	ttcagcaacc	agccggtctt	attccagtat	tattttgccc	720
gtggttattg	ctttgattgt	aataacactt	tcagtatttg	ttctggtggg	tttgtaccga	780
atgtgctgga	aggcagatcc	gggcacacca	gaaaatggaa	atgatcaacc	tcagtctgat	840
aaagagagcg	tgaagcttct	taccgttaag	acaattttct	atgagtctgg	tgagcactct	900
gcacaaggaa	aaaccaagaa	ctgacagctt	gaggaattct	ctccacacct	aggcaataat	960
tacgcttaat	cttcagcttc	tatgcaccaa	gcgtggaaaa	ggagaaagtc	ctgcagaatc	1020
aatcccgaact	tccatacctg	ctgctggact	gtaccagacg	tctgtcccag	taaagtgatg	1080
tccagctgac	atgcaataat	ttgatggaat	caaaaagaac	cccggggctc	tcctgttctc	1140
tcacatttaa	aaattccatt	actccattta	caggagcggt	cctaggaaaa	ggaatttttag	1200
gaggagaatt	tgtgagcagt	gaatctgaca	gcccaggagg	tgggctcgct	gataggcatg	1260
actttcctta	atgtttaaag	ttttccgggc	caagaatttt	tatccatgaa	gactttccta	1320
cttttctcgg	tgttcttata	ttacctactg	ttagtattta	ttgtttacca	ctatgttaat	1380
gcagggaaaa	gttgacacgtg	tattattaaa	tattaggtag	aaatcatacc	atgctacttt	1440
gtacatataa	gtatttttatt	cctgcttttcg	tgttactttt	aataaataac	tactgtactc	1500
aatactctaa	aaatactata	acatgactgt	gaaaatggca	aaaaaa		1546

&lt;210&gt; 31

&lt;211&gt; 750

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 31

cacttgggca	ccccattttt	ctaaaaaaat	ggaaatctgg	agggcaaaaa	aggtgtgctg	60
aagggaagtg	cctctgatgg	cccaaaaacc	ttcttccaaa	ctagtgtagg	aatggaatgg	120
atagcaaatg	gatccttttt	ggcctccttt	ggagcatgcc	ttccctatct	tatccttggc	180
cccactaaag	cagaacgtta	cggatatttc	tgtttttgcc	attggatgcc	tatctggcca	240
aacagccttt	ccctaattgg	aaaatgcagt	cctgtttaaa	acctttgatt	tacgactact	300
tgtacatgct	tgctcattac	aattttgaca	ttttttacat	agtgaagacc	ccaaacatat	360
cagtgaacaa	tgacaagatc	ataaagaaca	gtatcatatt	attatttagt	cgcttttaca	420
gtggcaagcc	aattttgaaa	tatctcattt	aaaactcaga	cccaattcac	tgagttatac	480
tttttaatagc	ttcctcagca	cactattttc	catgcattaa	atatgataaa	ataatctatc	540
actgcccatac	ggtcttgtaa	aaaggaagtc	tgaatacaga	gccacaaca	ctaaaattgt	600
ttttctagct	acaaagtata	gcatcatcaa	cacagacacg	atttggaactc	cctgacaggt	660
ggattggaaa	acggtgttta	aagagaagag	aacattttta	cataaatgtc	attaagaatc	720
ccaaaggcct	tatttgtcac	caccgtcccg				750

<210> 32  
 <211> 1620  
 <212> DNA  
 <213> Homo sapiens

<400> 32  
 gcaattcccc cctcccacta aacgactccc agtaattatg tttacaaccc attggatgca 60  
 gtgcagccat tcataagaac cttggtgccc cagaaaaatc tgtccttttt ggtaccaaac 120  
 ctgaggtcctt ttggaagata atgtagaaaa ccactaccta ttgaaggcct gttttggcta 180  
 atctgtgcaa actctgatga tacctgcctt atgtggattc ttttccacac tgctttcatt 240  
 ttttaagtata aagacttaga aaactagaat aatgctttta caaataatta aaagtatgtg 300  
 atgttctggg ttttttcctt ctttttagaa ccccgccctc atttaaaaaa ttaaaaaaaa 360  
 aaaaaaaact tttaacattt aaaaaataaa aattaacaaa atttcaacta ttccaggaca 420  
 cgctggcatt tggactcaat gaaaagggca cctaagaaa ataaggctga ctgaatgttt 480  
 tcataattt tcacacaata acagtcctt tctatccagc ttgccttcca tttatctcta 540  
 ggggttagctt ttcaggcaac atccttggtc attgccaga aagtacctga gctatcagt 600  
 attggaatgg cacaggaaac cgaatcacat ggggtgccctc cccttggttt tcaagtatct 660  
 tggagttgtg cacaaaaatt aggtcatgcc ttcagtgtct tgttctttta acctacctt 720  
 tgacaatcag gtgctaataa ttgtatacta ttaaaaccag cacataagta ttgtaaatgt 780  
 gtgttcctcc taggttgga gaaatgtctt tccttctatc tgggtcctgt taaagcgggt 840  
 gtcagttgtg tcttttcacc tcgatttgtg aattaataga attgggggga gaggaaatga 900  
 tgatgtcaat taagtttcag gtttggcatg atcatcattc tcgatgatat tctcactttg 960  
 tcgcaaatct gcccttatcg taagaacaag tttcagaatt ttccctccac tatacgactc 1020  
 cagtattatg tttacaatcc attggatgag tgcagcatta taagaccttg gtgccagaa 1080  
 aaatctgtcc tttttggtac caaacctgag gtcttttgga agataatgta gaaaaccact 1140  
 acctattgaa ggcctgtttt ggctaactct tgcaaaactc gatgatacct gcttatgtgg 1200  
 attcttttcc acactgcttt catttttaag tataaagact tagaaaacta gaataatgct 1260  
 tttacaaata attaaaagta tgtgatgttc tgggtttttt ccttcttttt agaaccctgt 1320  
 atttaaacaa gccttctttt taagtcttgt ttgaaattta agtctcagat cttctggata 1380  
 ccaaatcaaa aacccaacgc gtaaaacagg gcagtatattg tgttcctaata tttaaaaagc 1440  
 tttatgtata ctctataaat atagatgcat aaacaacact tccccttgag tagcacatca 1500  
 acatacagca ttgtacatta caatgaaaat gtgtaactta aggggtattat atatataaat 1560  
 acatatatac ctttgtaacc tttatactgt aaataaaaaa gttgcttttag tcaaaaaaaa 1620

<210> 33  
 <211> 2968  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
 gaaaaagtag aaggaaacac agttcatata gaagtaaaag aaaaccctga agaggaggag 60  
 gaggaggaag aagaggaaga agaagatgaa gaaagtgaag aggaggagga agaggaggga 120  
 gaaagtgaag gcagtgaagg tgatgaggaa gatgaaaagg tgtcagatga gaaggattca 180  
 ggggaagacat tagataaaaa gccaaagtaaa gaaatgagct cagattctga atatgactct 240  
 gatgatgatc ggactaaaga agaaagggct tatgacaaag caaaacggag gattgagaaa 300  
 cggcgacttg aacatagtaa aaatgtaaac accgaaaagc taagagcccc tattatctgc 360  
 gtacttgggc atgtggacac agggaagaca aaaattctag ataagctccg tcacacacat 420  
 gtacaagatg gtgaagcagg tggatatcaca caacaaattg gggccaccaa tgttcctctt 480  
 gaagctatta atgaacagac taagatgatt aaaaattttg atagagagaa tgtacggatt 540  
 ccaggaatgc taattattga tactcctggg catgaatctt tcagtaatct gagaaataga 600  
 ggaagctctc tttgtgacat tgccatttta gttgttgata ttatgcatgg tttggagccc 660  
 cagacaattg agtctatcaa ccttctcaaa tctaaaaaat gtcccttcat tgttgactc 720  
 aataagattg atagggtata tgattggaaa aagagtcctg actctgatgt ggctgctact 780  
 ttaaagaagc agaaaaagaa tacaaaagat gaatttgagg agcgagcaaa ggctattatt 840  
 gtagaatttg cacagcaggg tttgaatgct gctttgtttt atgagaataa agatccccgc 900  
 acttttgtgt ctttgggtacc tacctctgca catactggtg atggcatggg aagtctgatc 960  
 taccttcttg tagagttaac tcagaccatg ttgagcaaga gacttgcaac ctgtgaagag 1020  
 ctgagagcac aggtgatgga gggttaaagct ctcccgggga tgggcaccac tatagatgtc 1080

atcttgatca	atgggcggtt	gaaggaagga	gatacaatca	ttgttcctgg	agtagaaggg	1140
cccatgttaa	ctcagattcg	aggcctcctg	ttacctcctc	ctatgaagga	attacgagtg	1200
aagaaccagt	atgaaaagca	taaagaagta	gaagcagctc	agggggtaaa	gattccttgga	1260
aaagacctgg	agaaaacatt	ggctgggtta	ccctccttg	tggcttataa	agaagatgaa	1320
atccctgttc	ttaaagatga	attgatccat	gagttaaagc	agacactaaa	tgctatcaaa	1380
ttagaagaaa	aaggagtcta	tgtccaggca	tctacactgg	gttctttgga	agctctactg	1440
gaatttctga	aaacatcaga	agtgccctat	gcaggaatta	acattggccc	agtgcataaa	1500
aaagatgtta	tgaaggcttc	agtgatgttg	gaacatgacc	ctcagtatgc	agtaattttg	1560
gccttcgatg	tgagaattga	acgagatgca	caagaaatgg	ctgatagtgt	aggagttaga	1620
atTTTTtagtg	cagaaattat	ttatcattta	tttgatgcct	ttacaaaata	tagacaagac	1680
tacaagaaac	agaaacaaga	agaatttaag	cacatagcag	tatttccctg	caagataaaa	1740
atcctccctc	agtacatttt	taattctcga	gatccgatag	tgatgggggt	gacgggtgga	1800
gcaggtcagg	tgaaacaggg	gacaccctag	tgtgtcccaa	gcaaaaattt	tgttgacatc	1860
ggaatagtaa	caagtattga	aataaaccat	aaacaagtgg	atgttgcaaa	aaaaggacaa	1920
gaagtttgtg	taaaaataga	acctatccct	ggtagtcac	ccaaaatggt	tgggaagacat	1980
tttgaagcta	cagatattct	tgtagtaag	atcagccggc	agtccattga	tgactcaaaa	2040
gactgggttca	gagatgaaat	gcagaagagt	gactggcagc	ttattgtgga	gctgaagaaa	2100
gtatttgaaa	tcatctaatt	ttttcacatg	gagcaggaac	tggagttaat	gcaatactgt	2160
gttgtaatat	cccaacaaaa	atcagacaaa	aatggaaca	gacgtatttg	gacactgatg	2220
gacttaagta	tggaaggaag	aaaaataggt	gtataaaatg	ttttccatga	gaaaccaaga	2280
aacttacact	ggtttgacag	tggtcagtta	catgtcccca	cagttccaat	gtgcctgttc	2340
actcacctct	cccttcccca	acccttctct	acttggctgc	tgttttaaag	tttgcccttc	2400
cccaaatttg	gatttttatt	acagatctaa	agctctttcg	attttatact	gattaaatca	2460
gtactgcagt	atttgattaa	aaaaaaaaaa	gcagattttg	tgattccttg	gacttttttg	2520
acgtaagaaa	tacttcttta	tttatgcata	ttcttcccac	agtgattttt	ccagcattct	2580
tctgccatat	gccttttaggg	cttttataaa	atagaaaatt	aggcattctg	atatttcttt	2640
agctgctttg	tgtgaaacca	tggtgtaaaa	gcacagctgg	ctgcttttta	ctgcttgtgt	2700
agtcacgagt	ccattgtaat	catcacaatt	ctaaaccaa	ctaccaataa	agaaaacaga	2760
catccaccag	taagcaagct	ctgttaggct	tccatggtta	gtggtagctt	ctctcccaca	2820
agttgtcctc	ctaggacaag	gaattatctt	aacaaactaa	actatccatc	acactacctt	2880
ggtagccag	cacctgggta	acagtaggag	attttataca	ttaatctgat	ctgtttaatc	2940
tgatcggttt	agtagagatt	ttatacat				2968

&lt;210&gt; 34

&lt;211&gt; 6011

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 34

acggggcgcc	ggacgacccg	cacatcttat	cctccacgcc	ccactcgcac	tccgagcggg	60
accgcccccg	actccccctc	gggccggcca	ctcagaggag	gaggagagag	gccgccggcc	120
cggcttgagc	cgagcgcagc	accccccgcg	ccccgcgcca	gaagtttggt	tgaaccgggc	180
tgccgggaga	aacttttttc	ttttttcccc	ctctcccg	agagtctctg	gaggaggagg	240
ggaactcccc	cggcccaagg	ctcgtgggct	cggggctcgc	cggccgcaga	aggggcgggg	300
tccgcccccg	aggggaggcg	cccccgggga	cccagagggg	gggtgaggac	cgcgggctgc	360
tggtgcggcg	gcggcagcgt	gtgccccgcg	caggggaggc	gccgccccgc	tcccgccccg	420
gctgcgagga	ggaggcggcg	gcggcgcagg	aggatgtact	tggtggcggg	ggacaggggg	480
ttggccggct	gcgggcacct	cctggctctg	ctgctggggc	tgctgctgct	gccggcgcg	540
tccggcacc	gggcgctggt	ctgcctgccc	tgtgacgagt	ccaagtgcga	ggagcccagg	600
aaccgccccg	ggagcatcgt	gcagggcgct	tgcggctgct	gctacacgtg	cgcagccag	660
gggaacgaga	gctgcggcg	caccttcggg	atttacggaa	cctgcgaccg	ggggctgcgt	720
tgtgtcatcc	gcccccgct	caatggcgac	tccctcaccg	agtacgaagc	gggcgtttgc	780
gaagatgaga	actggactga	tgaccaactg	cttggtttta	aaccatgcaa	tgaaaacctt	840
attgctggct	gcaatataat	caatgggaaa	tgtgaatgta	acaccattcg	aacctgcagc	900
aatccctttg	agtttccaag	tcaggatatg	tgcctttcag	ctttaaagag	aattgaagaa	960
gagaagccag	attgctccaa	ggcccgtgt	gaagtccagt	tctctccacg	ttgtcctgaa	1020
gattctgttc	tgatcgaggg	ttatgtctct	cctggggagt	gctgtccctt	accagccgc	1080
tgcgtgtgca	accccgccag	ctgtctgcgc	aaagtctgcc	agccgggaaa	cctgaacata	1140



ctagtgtcaa	aagcctcagg	gaagccggga	gagtgtctgtg	acctctatga	gtgcaaacca	1200
gttttcggcg	tggactgcag	gactgtggaa	tgcctactctg	ttcagcagac	cgctgtcccc	1260
ccggacagct	atgaaactca	agtcagacta	actgcagatg	gttgctgtac	tttgccaaca	1320
agatgcgagt	gtctctctgg	cttatgtggt	ttccccgtgt	gtgaggtggg	atccactccc	1380
cgcatagtct	ctcgtggcga	tgggacacct	ggaaagtgtc	gtgatgtctt	tgaatgtgtt	1440
aatgatacaa	agccagcctg	cgtattttaac	aattgtggaat	attatgatgg	agacatgttt	1500
cgaatggaca	actgtcgggt	ctgtcgatgc	caagggggcg	ttgccatctg	cttcaccgcc	1560
cagtgtgggtg	agataaactg	cgagaggtac	tacgtgcccg	aaggagagtg	ctgcccagtg	1620
tgtgaagatc	cagtgtatcc	ttttaataat	cccgtctggc	gctatgccaa	tggcctgatc	1680
cttgcaccag	gagaccgggtg	gcgggaagac	gactgcacat	tctgccagtg	cgtcaacggt	1740
gaacgccact	gcgttgcgac	cgtctgcgga	cagacctgca	caaaccctgt	gaaagtgcct	1800
ggggagtgtt	gccctgtgtg	cgaagaacca	accatcatca	cagttgatcc	acctgcatgt	1860
ggggagttat	caaactgcac	tctgacacgg	aaggactgca	ttaatggttt	caaacgcgat	1920
cacaatgggtt	gtcggacctg	tcagtgcata	aacaccagg	aactatgttc	agaacgtaaa	1980
caaggctgca	ccttgaactg	tcccttcggt	ttccttactg	atgcccaaaa	ctgtgagatc	2040
tgtgagtgcc	gcccagggcc	caagaagtgc	agaccataaa	tctgtgacaa	gtattgtcca	2100
cttgatttgc	tgaagaataa	gcacggctgt	gacatctgtc	gctgtaagaa	atgtccagag	2160
ctctcatgca	gtaagatctg	ccccttgggt	ttccagcagg	acagtcacgg	ctgtcttatc	2220
tgcaagtgca	gagaggcctc	tgcttcagct	gggccacca	tctgtcggg	cacttgtctc	2280
accgtggatg	gtcatcatca	taaaaatgag	gagagctggc	acgatgggtg	ccgggaatgc	2340
tactgtctca	atggacggga	aatgtgtgcc	ctgatcacct	gcccgggtgc	tgcctgtggc	2400
aacccacca	ttcaccttgg	acagtgtctg	ccatcatgtg	cagatgactt	tgtggtgcag	2460
aagccagagc	tcagtactcc	ctccatttgc	cacgccccg	gaggagaata	ctttgtggaa	2520
ggagaaacgt	ggaacattga	ctcctgtact	cagtgcacct	gccacagcgg	acgggtgtctg	2580
tgtgagacag	aggtgtgccc	accgtgtctc	tgccagaacc	cctcacgcac	ccaggattcc	2640
tgctgcccac	agtgtacaga	tcaacctttt	cggccttctc	tgtcccgcaa	taacagcgta	2700
cctaattact	gcaaaaatga	tgaaggggat	atattcctgg	cagctgagtc	ctggaagcct	2760
gacgtttgta	ccagctgcat	ctgcattgat	agcgttaatta	gctgtttctc	tgagtctctg	2820
ccttctgtat	cctgtgaaag	acctgtcttg	agaaaaggcc	agtgttgtcc	ctactgcata	2880
aaagacacaa	ttccaaagaa	ggtggtgtgc	cacttcagtg	ggaaggccta	tgccgacgag	2940
gagcgggtggg	accttgacag	ctgcacccac	tgctactgcc	tgcagggcca	gaccctctgc	3000
tcgaccgtca	gctgcccccc	tctgcectgt	ggtgagccca	tcaacgtgga	aggaagttgc	3060
tgcccaatgt	gtccagaaat	gtatgtccca	gaaccaacca	atatacccat	tgagaagaca	3120
aaccatcgag	gagaggttga	cctggaggtt	ccccgtggc	ccacgcctag	tgaaaatgat	3180
atcgctccatc	tccctagaga	tatgggtcac	ctccaggtag	attacagaga	taacaggctg	3240
caccaagtgtg	aagattcttc	actggactcc	attgctcag	ttgtggttcc	cataattata	3300
tgctctctcta	ttataatagc	attcctatcc	atcaatcaga	agaaacagtg	gataccactg	3360
ctttgtctggt	atcgaacacc	aactaagcct	tcttccttaa	ataatcagct	agtatctgtg	3420
gactgcaaga	aaggaaccag	agtccaggtg	gacagttccc	agagaatgct	aagaattgca	3480
gaaccagatg	caagattcag	tggcttctac	agcatgcaaa	aacagaacca	tctacaggca	3540
gacaatttct	accaaacagt	gtgaagaaag	gcaactagga	tgaggtttca	aaagacggaa	3600
gacgactaaa	tctgctctaa	aaagtaaaat	agaatttgtg	cacttgctta	gtggatttga	3660
ttggattgtg	acttgatgta	cagcgctaag	accttactgg	gatgggctct	gtctacagca	3720
atgtgcagaa	caagcattcc	cacttttctc	caagataact	gaccaagtgt	tttcttagaa	3780
ccaaagtttt	taaagtgtct	aagatatatt	tgctgtgaag	atagctgtag	agatatttgg	3840
ggtggggaca	gtgagtttgg	atggggaaag	gggtgggagg	gtggtgttgg	gaagaaaaat	3900
tggtcagctt	ggctcgggga	gaaacctggt	aacataaaaag	cagttcagtg	gcccagaggt	3960
tatttttttc	ctattgctct	gaagactgca	ctggttgctg	caaagctcag	gcctgaatga	4020
gcaggaaaca	aaaaaggcct	tgcgacccag	ctgccataac	caccttagaa	ctaccagacg	4080
agcacatcag	aaccctttga	cagccatccc	aggtctaaaag	ccacaagttt	cttttctata	4140
cagtcacaac	tgcagtaggc	agtgaagaa	ccagagaaat	gcgatagcgg	catttctcta	4200
aagcgggtta	ttaaggatat	atacagttac	acttttctgt	gcttttattt	tcttccaagc	4260
caatcaatca	gccagttcct	agcagagtca	gcacatgaac	aagatctaag	tcatttcttg	4320
atgtgagcac	tggagctttt	tttttttaca	acgtgacagg	aagaggaggg	agagggtgac	4380
gaacaccagg	catttccagg	ggctatatatt	cactgtttgt	tgttgctttg	ttctgttata	4440
ttgttggttg	ttcatagttt	ttgttgaagc	tctagcttaa	gaagaaactt	tttttaaaaa	4500
gactgttttg	ggattctttt	tccttattat	atactgattc	tacaaaatag	aaactacttc	4560
attttaattg	tatattatcc	aagcaccttt	gttgaagctc	aaaaaaaatg	atgcctcttt	4620

```

aaacttttagc aattatagga gtatttatgt aactatctta tgcttcaaaa aacaaaagta 4680
tttgtgtgca tgtgtatata atatatatat atacatatat atttatacac atacaattta 4740
tgttttcctg ttgaatgtat ttttatgaga ttttaaccag aacaaaggca gataaacagg 4800
cattccatag cagtgccttt gatcacttac aaattttttg aataacacaa aatctcattc 4860
tacctgcagt ttaattggaa agatgtgtgt gtgagagtat gtatgtgtgt gtgtgtgtgt 4920
gtgtgtgccc gcgcacgcac gccttgagca gtcagcattg cacctgctat ggagaagggt 4980
attcctttat taaaatcttc ctcatttgga tttgctttca gttgggtttc aatttgctca 5040
ctggccagag acattgatgg cagttcttat ctgcatcact aatcagctcc tggatttttt 5100
tttttttttt tcaaacaatg gtttgaaaca actactggaa tattgtccac aataagctgg 5160
aagtttggtg tagtatgcct caaatataac tgactgtata ctatagtggg aacttttcaa 5220
acagccctta gcacttttat actaattaac ccatttgtgc attgagtttt cttttaaaaa 5280
tgcttggtgt gaaagacaca gatacccagt atgcttaacg tgaaaagaaa atgtgttctg 5340
ttttgtaaag gaactttcaa gtattgttgt aaatacttgg acagagggtg ctgaactttt 5400
aaaaaaatta atttattatt ataatagcct aatttattaa tctgaagatt aaccattttt 5460
ttgtcttaga atatcaaaaa gaaaaagaaa aagggtgttct agctgtttgc atcaaaggaa 5520
aaaaagattt attatcaagg ggcaatatat ttatcttttc caaaataaat ttgttaatga 5580
tacattacaa aaatagattg acatcagcct gattagtata aattttgttg gtaattaatc 5640
cattcctggc ataaaaagtc tttatcaaaa aaaattgtag atgcttgctt tttgtttttt 5700
caatcatggc catattatga aaatactaac aggatatagg acaagggtgta aattttttta 5760
ttattatttt aaagatatga tttatcctga gtgctgtatc tattactctt ttactttggg 5820
tcctgttgtg ctcttgtaaa agaaaaatat aatttcctga agaataaaat agatatatgg 5880
cacttgaggt gcatcatagt tctacagttt gtttttgttt tcttcaaaaa agctgtaaga 5940
gaattatctg caacttgatt cttggcagga aataaacatt ttgagttgaa atcaaaaaaa 6000
aaaaaaaaaa a                                     6011

```

<210> 35

<211> 716

<212> DNA

<213> Homo sapiens

<400> 35

```

gcagtacctg gagtgccttg caggggggaaa gcgaaccggg ccttgaagtc cgggggcagtc 60
acccggggct cctgggcccgc tctgccgggc tggggctgag cagcgatcct gctttgtccc 120
agaagtccag agggatcagc cccagaacac accctcctcc ccgggacgcc gcagctttct 180
ggaggctgag gaaggcatga agagtgggct ccacctgctg gccgactgag aaaagaattt 240
ccagaactcg gtcctatttt acagattgag aaactatggg tcaagaagag aggacggggc 300
ttgaggggaat ctctgattc tccttatatg acctcaaact gaccatacta aacagtgtag 360
aagggtctttt taaggctcta aatgtcaggg tctcccaccc cctgatgcct gacttgtaca 420
gtcagtggtg agtagacggg ttctccacc caggggtgac tcaggggggat gatctggggtc 480
ccattctggg cttaagaccc caaacaaggg ttttttcagc tccaggatct ggagcctcta 540
tctgggttagt gtcgtaacct ctgtgtgcct cccgttacct catctgtcca gtgagctcag 600
cccccatcca cctaacaggg tggccacagg gattactgag ggtaagacc ttagaactgg 660
gtctagcacc cgataagagc tcaataaatg ttgttccttt ccacatcaaa aaaaaa 716

```

<210> 36

<211> 395

<212> DNA

<213> Homo sapiens

<400> 36

```

ccaatacttc attcttcatt ggtggagaag attgtagact tctaagcatt ttccaaataa 60
aaaagctatg atttgatttc caacttttaa acattgcatg tcctttgccg tttactacat 120
tctccaaaaa aaccttgaaa tgaagaaggc cacccttaaa atacttcaga ggctgaaaat 180
atgattatta cattggaatc ctttagccta tgtgatattt ctttaacttt gcactttcac 240
gccagtaaaa accaaagtca gggtaaccaa tgtcatttta caaaatgtta aaaccctaata 300
tgcagttcct tttttaaaatt attttaaaga ttacttaaca acattagaca gtgcaaaaaa 360
agaagcaagg aaagcattct taattctacc atcct                                     395

```

<210> 37  
 <211> 134  
 <212> DNA  
 <213> Homo sapiens

<400> 37  
 ccctcgagcg gccgcccggg caggtacttt taccaccgaa ttgttcactt gactttaaga 60  
 aaccataaaa gctgcctggc ttccagcaac aggcctatca acaccatggt gagtctccat 120  
 aaggacacc gtgt 134

<210> 38  
 <211> 644  
 <212> DNA  
 <213> Homo sapiens

<400> 38  
 aagcctgttg tcatggggga ggtggtggcg cttggtggcc actggcgcc gaggtagagg 60  
 cagtggcgct tgagttggtc gggggcagcg gcagatttga ggcttaagca acttcttccg 120  
 gggaagagtg ccagtgcagc cactgttaca attcaagatc ttgatctata tccatagatt 180  
 ggaatatttg tgggccagca atcctcagac gcctcactta ggacaaatga ggaaactgag 240  
 gcttggtgaa gttacgaaac ttgtccaaaa tcacacaact tgtaaagggc acagccaaga 300  
 ttcagagcca ggctgtaaaa attaaaatga acaaattacg gcaaagtttt aggagaaaga 360  
 aggatgttta tgttccagag gccagtcgtc cacatcagtg gcagacagat gaagaaggcg 420  
 ttcgcaccgg aaaatgtagc ttcccggtta agtaccttgg ccatgtagaa gttgatgaat 480  
 caagaggaat gcacatctgt gaagatgctg taaaaagatt gaaagctgaa aggaagttct 540  
 tcaaaggctt ctttggaaaa actggaaaga aagcagttaa agcagtttct gtgggtctaa 600  
 gcagatggac tcagaggttg tggatgaaaa actaaggacc tcat 644

<210> 39  
 <211> 657  
 <212> DNA  
 <213> Homo sapiens

<400> 39  
 ctttttgttt gggttttcca atgtagatgt cttagtgaaa tgtgcagata tactttgttc 60  
 cttatatggt caccagtgtt aattatggac aaatacatta aaacaagggt tcctggccca 120  
 gcctcccatc taatctcttt gatactcttg gaatctaagt ctgaggagcg atttctgaat 180  
 tagccagtgt tgtaccaact ttctgttagg aattgtatta gaataacctt tctttttcag 240  
 acctgctcag tgagacatct tggggaatga agtaggaaaa tagacatttg gtggaaaaaac 300  
 agcaaaatga gaacattaaa aagactcatt caagtatgag tataaagggc atggaaattc 360  
 tggtcctttg agcaaaatga gaagaaaaaa ttctgctcag cagtattcac tgtgttaaga 420  
 ttttttgttt ttacacgaa tggaaaaatg atgtgtaagt ggtatagatt ttaatcagct 480  
 aacagtcact ccagagattt tgatcagcac caattcctat agtagtaagt atttaaaagt 540  
 taagaaatac tactacattt aacattataa agtagagttc tggacataac tgaaaattag 600  
 atgtttgctt caatagaaat ttgttccac ttgtattttc aacaaaatta tcggaac 657

<210> 40  
 <211> 1328  
 <212> DNA  
 <213> Homo sapiens

<400> 40  
 acaattttta aataactagc aattaatcac agcatatcag gaaaaagtac acagtgagtt 60  
 ctgggttagtt tttgtaggct cattatgggt agggctcgta agatgtatat aagaacctac 120  
 ctatcatgct gtatgtatca ctcatccat tttcatgttc catgcatact cgggcatcat 180  
 gctaatatgt atccttttaa gcactctcaa ggaaacaaaa gggcctttta tttttataaa 240  
 ggtaaaaaaa attcccaaaa tattttgcac tgaatgtacc aaaggtgaag ggacattaca 300  
 atatgactaa cagcaactcc atcacttgag aagtataata gaaaatagct tctaaatcaa 360

acttccttca	cagtgccgtg	tctaccacta	caaggactgt	gcattctaagt	aataatTTTT	420
taagattcac	tatatgtgat	agtatgat	gcatttattt	aaaatgcatt	agactctctt	480
ccatccatca	aatactttac	aggatggcat	ttaatacaga	tatttcgtat	ttccccact	540
gctttttatt	tgtacagcat	cattaaacac	taagctcagt	taaggagcca	tcagcaacac	600
tgaagagatc	agtagtaaga	attccatttt	ccctcatcag	tgaagacacc	acaaattgaa	660
actcagaact	atattttctaa	gcctgcattt	tcactgatgc	ataattttct	tagtaaatatt	720
aagagacagt	ttttctatgg	catctccaaa	actgcattgc	atcactagtc	ttactttctgc	780
ttatttttat	gagaagggtat	tcttcatttt	aattgctttt	gggattactc	cacatctttg	840
tttattttctt	gactaatcag	attttcaata	gagtgaagtt	aaattggggg	tcataaaagc	900
attggattga	catatgggtt	gccagcctat	gggtttacag	gcattgcccc	aacattttctt	960
tgagatctat	atttataagc	agccatggaa	ttcctattat	gggatgttgg	caatcttaca	1020
ttttatagag	gtcatatgca	tagttttcat	agggtgtttg	taagaactga	ttgctctcct	1080
gtgagtttaag	ctatgtttac	tactgggacc	ctcaagagga	ataccactta	tggtacactc	1140
ctgcactaaa	ggcacgtact	gcagtgtgaa	gaaatgttct	gaaaaagggg	tatagaaatc	1200
tggaaataag	aaaggaagag	ctctctgtat	tctataattg	gaagagaaaa	aaagaaaaac	1260
ttttaactgg	aaatgttagt	ttgtacttat	tgatcatgaa	tacaagtata	tattttaattt	1320
tgaaaaaa						1328

&lt;210&gt; 41

&lt;211&gt; 987

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 41

aacagagact	ggcacaggac	ctcttcattg	caggaagatg	gtagtgtagg	caggtaacat	60
tgagctcttt	tcaaaaaagg	agagctcttc	ttcaagataa	ggaagtggta	gttatggtgg	120
taacccccgg	ctatcagtc	ggatgggtgc	cacccctcct	gctgtaggat	ggaagcagcc	180
atggagtg	agggagggc	aataagacac	ccctccacag	agcttggcat	catggggaagc	240
tggttctacc	tcttcctggc	tctttgttt	aaaggcctgg	ctgggagcct	tccttttggg	300
tgtctttctc	ttctccaacc	aacagaaaag	actgctcttc	aaagggtggag	ggtcttcatg	360
aaacacagct	gccaggagcc	caggcacagg	gctggggggc	tggaaaaagg	agggcacaca	420
ggaggagggg	ggagctggta	gggagatgct	ggctttacct	aagggtctga	aacaaggagg	480
gcagaatagg	cagaggcctc	tccgtcccag	gccattttt	gacagatggc	gggacggaaa	540
tgcaatagac	cagcctgcaa	gaaagacatg	tgttttgatg	acaggcagtg	tggccgggtg	600
gaacaagcac	aggccttgga	atccaatgga	ctgaatcaga	accctaggcc	tgccatctgt	660
cagccgggtg	acctgggtca	attttagcct	ctaaaagcct	cagtctcctt	atctgcaaaa	720
tgaggcttgt	gatacctgtt	ttgaagggtt	gctgagaaaa	ttaaagataa	gggtatccaa	780
aatagtctac	ggccatacca	ccctgaacgt	gcctaattct	gtaagctaag	cagggtcagg	840
cctggttagt	acctggatgg	ggagagtatg	gaaaacatac	ctgcccgcag	ttggagttgg	900
actctgtctt	aacagtagcg	tggcacacag	aaggcactca	gtaaataact	gttgaataaa	960
tgaagtagcg	atttggtgtg	aaaaaaa				987

&lt;210&gt; 42

&lt;211&gt; 956

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 42

cggacgggtg	ggcggacgcg	tgggtgcagg	agcagggcgg	ctgccgactg	ccccaaccaa	60
ggaaggagcc	cctgagtc	cctgcgcctc	catccatctg	tccggccaga	gccggcatcc	120
ttgctgtct	aaagccttaa	ctaagactcc	cgccccgggc	tggccctgtg	cagaccttac	180
tcaggggatg	tttacctggg	gctcgggaag	ggaggggaag	gggcccggga	gggggcacgg	240
caggcgtgtg	gcagccacac	gcaggcggcc	agggcggcca	gggacccaaa	gcaggatgac	300
cacgcacctc	cacgccactg	cctcccccca	atgcatttgg	aaccaaagtc	taaactgagc	360
tcgcagcccc	cgcgcctccc	ctccgcctcc	catcccgtt	agcgtcttgg	acagatggac	420
gcaggccctg	tccagccccc	agtgcgctcg	ttccggtccc	cacagactgc	cccagccaac	480
gagattgctg	gaaaccaagt	caggccaggt	gggcccagaa	aaggggccagg	tgcggcctgg	540
ggggaacgga	tgtccgagg	actggactgt	ttttttcaca	catcgttgcc	gcagcgggtg	600

```

gaaggaaagg cagatgtaaa tgatgtgttg gtttacaggg tatatttttg ataccttcaa 660
tgaattaatt cagatgtttt acgcaaggaa ggacttacct agtattactg ctgctgtgct 720
tttgatctct gcttaccgtt caagaggcgt gtgcaggccg acagtcgggtg accccatcac 780
tcgcaggacc aagggggcgg ggactgctgg ctacgcccc gctgtgtcct cctccccctc 840
ccttccttgg gcagaatgaa ttcgatgcgt attctgtggc cgccatctgc gcagggtggt 900
ggatttctgt catttacaca cgtcgttcta attaaaaagc gaattatact ccaaaa 956

```

&lt;210&gt; 43

&lt;211&gt; 536

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 43

```

aaataaacac ttccataaca ttttgttttc gaagtctatt aatgcaatcc cacttttttc 60
cccctagttt ctaaagtgtt aagagagggg aaaaaaggct caggatagtt ttcacctcac 120
agtgttagct gtcttttatt ttactcttgg aaatagagac tccattaggg ttttgacatt 180
ttgggaaccc agttttacca ttgtgtcagt aaaacaataa gatagtttga gagcatatga 240
tctaaataaa gacatttgaa gggttagttt gaattctaaa agtaggtaat agccaaatag 300
cattctcatc ccttaacaga caaaaactta tttgtcaaaa gaattagaaa aggtgaaaat 360
atTTTTTcca gatgaaactt gtgccacttc caattgacta atgaaatata aggagacaga 420
ctggaaaaag tgggttatgc cacctttaa accctttctg gtaaatatta tggtagctaa 480
agggtggttt ccccggcacc tggacctgga caggtagggg tccgtgggta accagt 536

```

&lt;210&gt; 44

&lt;211&gt; 1630

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 44

```

ggggaggggac gagtatggaa ccctgaaggt agcaagtcca ggcactggcc tgaccatccg 60
gctccctggg caccaagtc caggcaggag cagctgtttt ccatcccttc ccagacaagc 120
tctattttta tcacaatgac ctttagagag gtctcccagg ccagctcaag gtgtcccact 180
atccctctg gagggaagag gcaggaaaat tctcccggg tccctgtcat gctactttct 240
ccatcccagt tcagactgtc caggacatct tatctgcagc cataagagaa ttataaggca 300
gtgatttccc ttaggcccag gacttgggcc tccagctcat ctgttccttc tgggcccatt 360
catggcagggt tctgggctca aagctgaact ggggagagaa gagatacaga gctaccatgt 420
gactttacct gattgccctc agtttggggg tgcttatttg gaaagagaga gacaaagagt 480
tacttgttac gggaaatatg aaaagcatgg ccaggatgca tagaggagat tctagcaggg 540
gacaggattg gctcagatga ccctgaggg ctcttccagt cttgaaatgc attccatgat 600
attaggaagt cgggggtggg tgggtggtgt gggctagttg gggttgaatt taggggccga 660
tgagcttggg tacgtgagca ggggtgtaag ttagggtctg cctgtatttc tgggtcccctt 720
ggaaatgtcc ccttcttcag tgtcagacct cagtcaccgt gtccatatcg tgcccagaaa 780
agtagacatt atcctgcccc atcccttccc cagtgcactc tgacctagct agtgccctgt 840
gcccagtgac ctgggggagc ctggctgcag gccctcactg gttccctaaa ccttggtggc 900
tgtgattcag gtccccaggg gggactcagg gaggaatatg gctgagttct gtagtttcca 960
gagttggctg gtagagcctt ctagaggttc agaattattg cttcaggatc agctgggggt 1020
atggaattgg ctgaggatca aacgtatgta ggtgaaagga taccaggatg ttgctaaaag 1080
tgaggggacag tttgggtttg ggacttacca ggggtgatgt agatctggaa cccccaagt 1140
aggctggagg gagttaaggt cagtatggaa gatagggttg ggacagggtg ctttggaatg 1200
aaagagtgc cttagagggc tccttgggcc tcaggaatgc tcctgtgct gtgaagatga 1260
gaagggtgct ttactcagtt aatgatgagt gactatattt accaaagccc ctactgctg 1320
ctgggtccct tgtagcacag gagactgggg actaaggccc ctcccagga agggacacca 1380
tcaggcctct ggctgaggca gtagcataga ggatccattt ctacctgcat tcccagagg 1440
actagcagga ggcagccttg agaaaccggc agttcccaag ccagcgctg gctgttctct 1500
cattgtcact gccctctccc caacctctcc tctaaccac tagagattgc ctgtgtcctg 1560
cctcttgcc cttgtagaat gcagctctgg ccctcaataa atgttctctg cattcatctg 1620
caaaaaaaaaa 1630

```

<210> 45  
 <211> 169  
 <212> DNA  
 <213> Homo sapiens

<400> 45  
 tcttttgctt ttagcttttt atttttgtat taacaggagt cttattacac ataggtctga 60  
 taaaactggg ttatgatctt cagtctgatt ccagtgtctg ataactagat aacgtatgaa 120  
 ggaaaaacga cgacgaacaa aaaagtaagt gcttggaaga cttagttga 169

<210> 46  
 <211> 769  
 <212> DNA  
 <213> Homo sapiens

<400> 46  
 tgcaggatcat atttactatc ggcaataaaa ggaagcaaag cagtattaag cagcgggtgga 60  
 atttgtcgct ttcacttttt ataaagtgcg acataaaatg tcatatttcc aaatttataa 120  
 acataactcc agttcttacc atgagaacag catgggtgatc acgaaggatc ttcttgaaaa 180  
 aaacaaaaac aaaaacaaaa aacaatgatc tcttctgggt atcacatcaa atgagataga 240  
 aagggtgact aggcaatctt agagatctgg caacttattt tatatataag gcatctgtga 300  
 ccaagagacg ttatgaatta aatgtacaaa tgtattatgt ataaatgtat taaatgcaag 360  
 cttcatataa tgacaccaat gtctctaagt tgctcagaga tcttgactgg ctgtggccct 420  
 ggccagctcc tttcctgata gtctgattct gccttcatat ataggcagct cctgatcatc 480  
 catgccagtg aatgagaaaa caagcatgga atatatataac tttaacatta aaaaatgttt 540  
 tattttgtaa taaaatcaaa tttcccattg aaaccttcaa aaactttgca gaatgaggtt 600  
 ttgatatatg tgtacaagta gtaccttctt agtgcaagaa aacatcatta tttctgtctg 660  
 cctgcctttt tgttttttaa aatgaagact atcattgaaa caagtttgtc ttcagtatca 720  
 ggacatgttg acggagagga aaggtaggaa agggtagggg atagaagcc 769

<210> 47  
 <211> 2529  
 <212> DNA  
 <213> Homo sapiens

<400> 47  
 tttagttcat agtaatgtaa aaccatttgt ttaattctaa atcaaatcac tttcacaaca 60  
 gtgaaaatta gtgactgggt aagggtgtgc actgtacata tcatcathtt ctgactgggg 120  
 tcaggacctg gtcctagtcc acaagggtgg caggaggagg gtggaggcta agaacacaga 180  
 aaacacacaa aagaaaggaa agctgccttg gcagaaggat gaggtggtga gcttgccgag 240  
 ggatggtggg aagggggctc cctggtgggg ccgagccagg agtcccaagt cagctctcct 300  
 gccttactta gctcctggca gaggtgagt ggggacctac gaggttcaaa atcaaatggc 360  
 atttggtccag cctggcttta ctaacagggt cccagagtgc ctctgttggc tgagctctcc 420  
 tgggctcact ccatttcatt gaagagtcca aatgattcat tttcctaccc acaacttttc 480  
 attattcttc tggaaaccca tttctgttga gtccatctga ctttaagtcc ctctccctcc 540  
 actagttggg gccactgcac tgaggggggt cccaccaatt ctctctagag aagagacact 600  
 ccagaggccc ctgcaacttt gcggatttcc agaagggtgat aaaaagagca ctcttgagtg 660  
 ggtgcccagg aatgttttaa atctatcagg cacactataa agctgggtgt ttcttcctac 720  
 caagtggatt cggcatatga accacctact caatacttta tattttgtct gtttaaacac 780  
 tgaactctgg tgttgacagg taaaaaggag aagagatggg gactgtgaag aggggagggc 840  
 ttccctcatc ttcctcaaga tctttgttcc cataaactat gcagtcataa ttgagaaaaa 900  
 gcaatagatg gggcttccta ccatttggtg gttattgtct ggggttagcca ggagcagtgt 960  
 ggatggcaaa gtaggagaga ggcccagagg aaagcccatc tccctccagc tttgggggtc 1020  
 ccagaaagag gctggatttc tgggatgaag cctagaaggc agagcaagaa ctggtccacc 1080  
 aggtgaacag tctacctgc ttggtaccat agtccctcaa taagattcag aggaagaagc 1140  
 ttatgaaact gaaaatcaaa tcaaggtatt gggagaata atttcccctc gattccacag 1200  
 gaggggaagc cacacaatat cattgtgctg gggctcccca aggccctgcc acctggcttt 1260  
 acaaatcatc aggggttgcc tgcttggcag tcacatgctt ccctgggttt agcacacata 1320

caaggagttt	tcagggaact	ctatcaagcc	ataccaaaat	cagggtcaca	tgtgggtttc	1380
ccctttccct	gcctcttcat	aaaagacaac	ttggcttctg	aggatggtgg	tcttttgcac	1440
gcagttgggc	tgacctgaca	aagccccag	tttctgtgg	caggttctgg	gagaggatgc	1500
attcaagctt	ctgcagccta	ggggacaggg	ctgcttggtc	agttattact	gcctcggagc	1560
tccaaatccc	accaaagtcc	tgactccagg	tctttcctaa	tgacacagtag	tcagtctcag	1620
cttcggcagt	attctcggct	gtatgttctc	tggcagagag	aggcagatga	acatagtttt	1680
agggagaaa	ctgatgggaa	acctgtgagt	taagccacat	gtctcaccag	gaataattta	1740
tgccaggaaa	ccagggaagtc	attcaagttg	ttctctgagg	ccaaagacac	tgagcacagc	1800
ccagagccaa	taaaagatct	ttgagtctct	ggtgaattca	cgaagtgacc	ccagcttttag	1860
ctactgcaat	tatgatTTTT	atgggacagc	aatttcttgc	atctctacag	aggaagaaga	1920
gggggagtg	gaggggaagg	aaagagaaca	gagcggcact	gggatttgaa	aggggaacct	1980
ctctatctga	ggagccccc	ctggcttcag	aagcaactta	ccaaggggta	tttaaagaca	2040
tgaaaatttc	cagaaatacc	atttggtgca	tccctttggt	tctgtaatat	taaactcagg	2100
tgaaattata	ctctgacagt	ttctctcttt	ctgcctcttc	cctctgcaga	gtcaggacct	2160
gcagaactgg	ctgaaacaag	atttcatggt	gtcaccatg	agagatgact	caatgccaa	2220
gcctgaagtt	atagagtgtt	tacagcgggt	gcatatttca	ggggtcatcg	ccaactggtc	2280
tcgagttcca	aagctctgat	gaagaaacaa	gactccttga	tgtgttactg	atcccactga	2340
ttccaggagt	caagattagc	caggaagcca	aacaccagga	gttgggggtg	cacgtcacca	2400
gtccagagcc	ctgccacgga	tgtacgcagg	agccagcat	taggcaatca	ggagccagaa	2460
catgatcacc	agggccacaa	ataggaagag	gcgtgacagg	aactgctcgt	ccacatacct	2520
ggggtgtcc						2529

&lt;210&gt; 48

&lt;211&gt; 1552

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 48

tttttttttt	tttttgattt	ctgggacaat	taagctttat	ttttcatata	tatatatatt	60
ttcatatata	tatatacata	catatataaa	ggaaacaatt	tgcaaattta	cacacctgac	120
aaaaccatat	atacacacat	atgtatgcat	acacacagac	agacacacac	acccgaagct	180
ctagccaggc	ccgttttcca	tccctaagta	ccattctctc	atttggggcc	ttctagggtt	240
ggggccctga	gcttggtttg	tagaagtttg	gtgctaatat	aaccatagct	ttaatcccca	300
tgaaggacag	tgtagacctc	atctttgtct	gctccccgct	gcctttcagt	tttacgtgat	360
ccatcaagag	ggctatggga	gccaaagtga	cacgggggat	tgaggcta	tcacctgaac	420
tcgaaaacag	cgcccagctt	cctcacgcga	ggcacgcgtc	ttttcttttt	ttttcctcga	480
gacggagtct	cgctgtgttg	cccaggctgg	agtgcagtgg	cacggtctcg	gctcactgca	540
agctccacct	cctggattca	taccattctc	ctgcttcagc	cttccgagta	gctgggacta	600
taggtgccaa	ccactacgcc	tagctaattt	ttttttgtat	tttttagtaga	gacagggttt	660
caccgtgtta	gccaggatgg	tctcgtcctg	actttgtgat	ccgcccgcct	cggcctccca	720
aagtgtctgg	attacaggcg	tgagccacca	cacctggccc	cggcacgtat	cttttaagga	780
atgacaccag	ttcctggctt	ctgaccaaag	aaaaaatgtc	acaggagact	ttgaagaggc	840
agacaggagg	gtggtggcag	caacactgca	gctgcttctg	gatgctgctg	gggtgctctc	900
cggagcgggt	gtgaacagcg	cacttcaaca	tgagcaggcg	cctggctccg	gtgtgtcctc	960
acttcagtgg	tgacctgga	tgggtgaagc	cagcctttgg	ggcaggaaac	cagctcagag	1020
aggctaccca	gctcagctgc	tggcaggagc	caggtattta	cagccataat	gtgtgtaaag	1080
aaaaaacacg	ttctgcaaga	aactctccta	cccgtcggg	agactggggc	tccttgcttg	1140
ggatgagctt	cactcaacgt	ggagatgggt	gtggactgg	ccctgaaaag	cgggccttgc	1200
agggccaagt	gaggtcctca	ggtcctaacc	cagtggccct	ctgaaagggg	gtgtgcaggc	1260
gaggggagca	ggaggcttct	ctctagtccc	tttgagggt	ttggctgaga	gaagagttag	1320
cagggagctg	ggaatggtcc	aggcagggaa	gggagctgaa	gtgattcggg	gctaattgct	1380
cagatcgatg	tatttctctc	cctggtctcc	cggagccctc	ttgtcaccgc	tgctgcctctg	1440
caggaggccc	atctcttctg	ggagcttatc	tgacttaact	tcaactacaa	gttcgctctt	1500
acgagaccgg	gggtagcgtg	atctcctgct	tccttgagcg	cctgcacggc	ag	1552

&lt;210&gt; 49

&lt;211&gt; 921

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 49

```

ctgttggtccc agctactcag gaggctgagg cgggaggatt gcttgagccc aggagttgga 60
tggtgcagtg agccaagatc gcaccattgc cctccactct gggccacgga gcaataccct 120
gtctcagaaa acaacaaca aaaagcagaa acgctgaagg ggtcggttta cgggaaaacc 180
gcctgtcaga acacttggtc actcctaccc cagatcagtg gacctgggaa tgaggggttg 240
tcccgggagg cttttctcca agctgttgcc accagaccgg ccatgggaac cctggccaca 300
gaagcctccc ggggagtgag ccagagcctg gaccgctgtg ctgatgtgtc tgggggtggag 360
ggaggggtggg gagtgtgcaa ggggtgtgtg gtgcccgggg ggtgttcacg ggcaagcatg 420
tgcgtgcctg tgtgtgtgcg tgcccctccc ctgcagccgt cgggtggtatc tccctccagc 480
cccttcgcca cttcttgagc attgtctgtc cacgtgagac tgcccagaga cagcagagct 540
ccacgtgggtt ttaaggggag acctttccct ggacctgggg gtctcgccgt atctcatgac 600
caggtgctaa atgaccggac atgcatcacc tgcctttcga tgaccaacct ccctgtcccc 660
gtcccgtgta cctgcccccg tggcgtctca cgggtgatgcc tgctcctgac attggtgttc 720
actgtagcaa actacattct ggatgggaat tttcatgtac atgtgtggca tgtggaaaaa 780
ttcaaataaa atggacttga tttagaaagc caaaaagctg tgtggtcctt ccagcacgga 840
tactttgacc tcttgccctac aaccctcttc ttgggtccga ggctggtagc tttgttcact 900
tcagatgggtt gggggcgggg g

```

&lt;210&gt; 50

&lt;211&gt; 338

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 50

```

atgatctatc tagatgccct accgtaaaat caaaacacaa aacctactg actcattccc 60
tcccttccag atattacccc atttctctac ttccattgt agccaaactt tccaaaaatt 120
catgttctgt cttcatttcc tcatgttcaa cccaccctgt cttagctacc acccctcagt 180
aacgacctag cctgggtaga aacaaatgtc agcatgatac catactcaat gatccttcgt 240
cactgttgtc attgtcatca ttccatggcc ttactttccc tctcagcgcc atttgctaca 300
gtaagaaact ttctttcttg aattcttggg tctcttgg

```

&lt;210&gt; 51

&lt;211&gt; 1191

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 51

```

ctagcaagca ggtaaacgag ctttgtacaa acacacacag accaacacat ccgggggatgg 60
ctgtgtgttg ctagagcaga ggctgattaa acactcagtg tgttggctct ctgtgccact 120
cctggaaaat aatgaattgg gtaaggaaca gttaataaga aaatgtgcct tgctaactgt 180
gcacattaca acaaagagct ggcagctcct gaaggaaaag ggcttgtgcc gctgccgttc 240
aaacttgtca gtcaactcat gccagcagcc tcagcgtctg cctccccagc acaccctcat 300
tacatgtgtc tgtctggcct gatctgtgca tctgctcgga gacgctcctg acaagtcggg 360
aatttctcta tttctccact ggtgcaaaga gcggttttct ccctgcttct cttctgtcac 420
ccccgctcct ctccccccagg aggtcctctg atttatggta gctttggact tgcttccccg 480
tctgactgtc cttgacttct agaatggaag aagctgagct ggtgaaggga agactccagg 540
ccatcacaga taaaagaaaa atacaggaag aaatctcaca gaagcgtctg aaaatagagg 600
aagacaaact aaagcaccag catttgaaga aaaaggcctt gagggagaaa tggcttctag 660
atggaatcag cagcggaaaa gaacaggaag agatgaagaa gcaaaatcaa caagaccagc 720
accagatcca gggtctagaa caaagtatcc tcaggcttga gaaagagatc caagatcttg 780
aaaaagctga actgcaaadc tcaacgaagg aagaggccat tttaaagaaa ctaaagtcaa 840
ttgagcggac aacagaagac attataagat ctgtgaaagt ggaaagagaa gaaagagcag 900
aagagtcaat tgaggacatc tatgctaata tccctgacct tccaaagtcc tacatacctt 960
ctagggttaag gaaggagata aatgaagaaa aagaagatga tgaacaaaat aggaaaagctt 1020
tatatgccat ggaaattaaa gttgaaaaag acttgaagac tggagaaaag acagttctgt 1080

```



```

cttccaatac ctctggccat cagatgactt taaaagggtac aggagtaaaa gtttaagatg 1140
atgggcaaaa gtccagtgtg ttcagtaaag tgctaatacac aagttggagg t 1191

```

```

<210> 52
<211> 1200
<212> DNA
<213> Homo sapiens

```

```

<400> 52
aacaggggact ctcaactctat caaccccagg ctggagtcog gtgcgcccac cctggctccc 60
tgcaacctcc gcctcccagg ctcaagcaac tctcctgcct cagtcgctct agtagctggg 120
actcaggga caccacca tgcccagcca atttttgcat tttttgtaga gacagggttt 180
cgcttctgt ccaggccggc atcatatact ttaaatacatg ccagatgac ttttaatacct 240
aatacaatat atcagggttg tttaaaaata attgcttttt tattattttt gcattttttgc 300
accaacctta atgctatgta aatagttgtt atactgttgc ttaacaacag tatgacaatt 360
ttggcttttt ctttgtatta ttttgtattt ttttttttta ttgtgtggtc tttttttttt 420
ttctcagtgt tttcaattcc tccttggttg aatccatgga tgcaaaaccc acagatatga 480
agggctggct atatatgcat tgatgattgt cctattatat tagttataaa gtgtcattta 540
atatgtagtg aaagttagtg tacagtggaa agagtagttg aaaacataaa catttggacc 600
tttcaagaaa ggtagcttg tgaagttttt caccttcaaa ctatgtccca gtcagggtcc 660
tgctactaat tagctataat ctttgcacaa attacatcac ctttgagtct cagttgcctc 720
acctgtaaaa tgaaagaact ggatactctc taaggctact tccagccctg tcattctata 780
actctgttat gctgagggaag aaattcacat tgtgttaact gtatgagtca aactgaaaat 840
gattattaaa gtgggaaaaa gccaatgtct tctcttagaa agctcaacta aatttgagaa 900
gaataatctt ttcaattttt taagaattta aatattttta agggtttgac ctattttatt 960
agagatgggg tctcactctg tcacccagac tggagtacag tggcacaatc atagctcact 1020
gctgcctcaa attcatgggc tcaagtgate ctctgcctc tgccctccaga gtagctgcga 1080
ctatgggcat gtgccaccac gcctggctaa catttgtatt gacctattta tttattgtga 1140
tttatatctt tttttttttt tctttttttt ttttttacia aatcagaaat acttattttg 1200

```

```

<210> 53
<211> 989
<212> DNA
<213> Homo sapiens

```

```

<400> 53
aagccaccac tcaaaacttc ctatacatth tcacagcaga gacaagtga cattttatttt 60
tatgcctttt ttctatgtg tatttcaagt ctttttcaaa acaaggcccc aggactctcc 120
gattcaatta gtccttgggc tggctgactg tgcaggagtc caggggagct ctacaaatgc 180
agagtgactc tttaccaaca taaaccctag atacatgcaa aaagcaggac ccttcctcca 240
ggaatgtgcc atttcagatg cacagcacc atgcagaaaa gctggaattt tccttggaa 300
cgactgtgat agaggtgctt acatgaacat tgctactgtc tttctttttt tttgagacag 360
gtttcgcttg tgcccaggct gagtgcattg cgtgatctca ctactgcaa ttccacctcc 420
aggttcaagc attctcctgc tcagcctcct agtagctggg ttacaggcac tgccaccatg 480
ccggctaatt ttgtattttt gtagagatgg atttctccat ttggtcaggc ggtctcgaac 540
cccaacctca gtgatctgcc acctcagcct cctaagtgtt ggattacagg atgagccacc 600
cgaccggcca ctactgtctt tctttgacct ttccagtttc gaagataaag aggaaataat 660
ttctctgaag tacttgataa aatttccaaa caaacacat gtccacttca ctgataaaaa 720
atttaccgca gtttggcacc taagagtatg acaacagcaa taaaaagtaa tttcaaagag 780
ttaagatttc ttcagcaaaa tagatgattc acatcttcaa gtcctttttg aaatcagtta 840
ttaatattat tcttctctca tttccatctg aatgactgca gcaatagttt tttttttttt 900
tttttttttt ttgcgagatg gaatctcgct ctgtcgccca gcgggagtg actggcgcaa 960
gcccggctca ccgcaatctc tgccacccg
989

```

```

<210> 54
<211> 250
<212> DNA
<213> Homo sapiens

```

&lt;400&gt; 54

```

catttcccca ttggtcctga tgttgaagat ttagttaaag aggctgtaag tcaggttcga 60
gcagaggcta ctacaagaag tagggaatca agtccctcac atgggctatt aaaactaggt 120
agtggaggag tagtgaaaaa gaaatctgag caacttcata acgtaactgc ctttcagggg 180
aaagggcatt ctttaggaac tgcattctgt aaccacacc ttgatccaag agctagggaa 240
acttcagttg                                     250

```

&lt;210&gt; 55

&lt;211&gt; 2270

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 55

```

gcgccccga gcagcgccc cgccctccgc gccttctccg ccgggacctc gagcgaaaga 60
ggcccgcgcg ccgcccagcc ctgcctcccc tgcccaccgg gcacaccggg ccgccacccc 120
gaccccgctg cgcacggcct gtccgctgca caccagcttg ttggcgctct cgtegcgcgcg 180
ctcgccccgg gctactcctg cgcgccacaa tgagctcccc catcgccagg gcgctcgctc 240
tagtcgtcac ccttctccac ttgaccaggc tggcgctctc cactgcccc gctgcctgcc 300
actgccccct ggaggcgccc aagtgcgcgc cgggagtcgg gctggtcggg gacggctgcg 360
gctgctgtaa ggtctgcgcc aagcagctca acgaggactg cagcaaaacg cagccctgcg 420
accacaccaa ggggtggaa tgcaacttcg gcgccaagtc caccgctctg aaggggatct 480
gcagagctca gtcagagggc agaccctgtg aatataactc cagaatctac caaaacgggg 540
aaagtttcca gcccaactgt aaacatcagt gcacatgtat tgatggcgcc gtgggctgca 600
ttcctctgtg tccccaaaga ctatctctcc ccaacttggg ctgtcccaac cctcggtgg 660
tcaaagttac cgggcagtgc tgcgaggagt gggctctgtg cgaggatagt atcaaggacc 720
ccatggagga ccaggacggc ctcttgggca aggagctggg attcgatgcc tccgaggtgg 780
agttgacgag aaacaatgaa ttgattgcag ttggaaaagg cagctcactg aagcggtccc 840
ctgttttttg aatggagcct cgcattcctat acaacccttt acaaggccag aaatgtattg 900
ttcaaacaac ttcattggtcc cagtgtctca agacctgtgg aactggatat tccacacgag 960
ttaccaatga caaccctgag tgccgccttg tgaaagaaac ccgattttgt gaggtgcggc 1020
cttggtgaca gccagtgtac agcagcttga aaaagggcaa gaaatgcagc aagaccaaga 1080
aatccccga accagtcagg tttacttacg ctggatgttt gagtgtgaag aaataccggc 1140
ccaagtactg cggttcctgc gtggacggcc gatgctgcac gcccagctg accaggctg 1200
tgaagatgcg gttccgctgc gaagatgggg agacattttc caagaacgtc atgatgatcc 1260
agtctgcaa atgcaactac aactgcccgc atgccaatga agcagcgttt ccttctaca 1320
ggctgttcaa tgacattcac aaatttaggg actaaatgct acctgggttt ccagggcaca 1380
cctagacaaa caagggagaa gagtgtcaga atcagaatca tggagaaaat gggcgggggg 1440
ggtgtgggtg atgggactca ttgtagaaag gaagccttgc tcattcttga ggagcattaa 1500
ggtatttcga aactgccaa ggtgctggtg cggatggaca ctaatgcagc cagattgga 1560
gaatactttg ctcatagta ttggagcaca tgttactgct tcattttgga gcttgtggag 1620
ttgatgactt tctgttttct gtttgtaaat tatttgctaa gcatattttc tctaggcttt 1680
tttccttttg gggttctaca gtcgtaaaag agataataag attagttgga cagtttaaag 1740
cttttattcg tcttttgaca aaagtaaatg ggagggcatt ccatcccttc ctgaagggg 1800
acactccatg agtgtctgtg agaggcagct atctgcactc taaactgcaa acagaaatca 1860
ggtgttttaa gactgaatgt tttatttatc aaaatgtagc ttttggggag ggaggggaaa 1920
tgtaatactg gaataatttg taaatgattt taattttata ttcagtgaag agattttatt 1980
tatggaatta accatttaat aaagaaatat ttacctaata tctgagtgtg tgccattcgg 2040
tatttttaga ggtgctccaa agtcattagg aacaacctag ctacgtact caattattca 2100
aacaggactt attgggatac agcagtgaat taagctatta aaataagata atgattgctt 2160
ttataccttc agtagagaa agtctttgca tataaagtaa tgtttaaaaa acatgtattg 2220
aacacgacat tgtatgaagc acaataaaga ttctgaagct aaaaaaaaaa 2270

```

&lt;210&gt; 56

&lt;211&gt; 1636

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 56

```

cttgaatgaa gctgacacca agaaccgcgg gaagagcttg ggcccaaagc aggaaagggg 60
agcgctcgag ttggaaagga accgctgctg ctggccgaac tcaagccccg gcgccccccac 120
cagtttgatt ggaagtccag ctgtgaaacc tggagcgctg ccttctcccc agatgggtcc 180
tggtttgctt ggtctcaagg acaactgcac gtcaaactga tcccctggcc gttggaggag 240
cagttcatcc ctaaagggtt tgaagccaaa agccgaagta gcaaaaatga gacgaaaggg 300
cggggcagcc caaaagagaa gacgctggac tgtggtcaga ttgtctgggg gctggccttc 360
agcccgtggc cttccccacc cagcaggaag ctctgggcac gccaccaccc ccaagtgcc 420
gatgtctctt gcctgggtct tgtacggga ctcaacgatg ggcagatcaa gatctgggag 480
gtgcagacag ggctcctgct tttgaatctt tccggccacc aagatgtcgt gagagatctg 540
agcttcacac ccagtggcag tttgattttg gtctccgcgt cacgggataa gactcttcgc 600
atctgggacc tgaataaaca cggtaaacag attcaagtgt tatcggggcca cctgcagtgg 660
gtttactgct gttccatctc cccagactgc agcatgctgt gctctgcagc tggagagaag 720
tcggctcttc tatggagcat gaggtcctac acgttaattc ggaagctaga gggccatcaa 780
agcagtgttg tctcttgatg cttctcccc gactctgccc tgcttgtcac ggcttcttac 840
gataccaatg tgattatgtg ggaccctac accggcgaaa ggctgagggtc actccaccac 900
accaggttg accccgccat ggatgacagt gacgtccaca ttagctcact gagatctgtg 960
tgcttctctc cagaaggctt gtaccttgcc acggtggcag atgacagact cctcaggatc 1020
tgggcccttg aactgaaaac tcccattgca tttgtccta tgaccaatgg gctttgtgtg 1080
acattttttc cacatgggtg agtcattgcc acagggacaa gagatggcca cgtccagttc 1140
tggacagctc ctagggtcct gtccctcactg aagcacttat gccggaaaagc ctttcgaagt 1200
ttcctaacaa cttaccaagt cctagcactg ccaatcccca agaaaatgaa agagtctctc 1260
acatacagga ctttttaagc aacaccacat cttgtgcttc tttgtagcag ggtaaatcgt 1320
cctgtcaaag ggagttgctg gaataatggg ccaaacatct ggtcttgcat tgaaatagca 1380
tttctttggg attgtgaata gaatgtagca aaaccagatt ccagtgtaca taaaagaatt 1440
tttttgtctt taaatagata caaatgtcta tcaactttaa tcaagttgta acttatattg 1500
aagacaattt gatacataat aaaaaattat gacaatgtcc tgggaaaaaa aaaatgtaga 1560
aagatggtga agggtgggat ggatgaggag cgtggtgacg ggggcctgca gcgggttggg 1620
gaccctgtgc tgcgtt                                     1636

```

&lt;210&gt; 57

&lt;211&gt; 460

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 57

```

ccatgtgtgt atgagagaga gagagattgg gagggagagg gagctcacta gcgcatatgt 60
gcctccaggg ggctgcagat gtgtctgagg gtgagcctgg tgaaagagaa gacaaaagaa 120
tggaatgagc taaagcagcc gcctgggggtg ggaggccgag cccattttgta tgcagcaggg 180
ggcaggagcc cagcaaggga gcctccattc ccaggactct ggagggagct gagaccatcc 240
atgcccgag agccctccct cacactccat cctgtccagc cctaattgtg caggtgggga 300
aactgaggct gggaagtcac atagcaagtg actggcagag ctgggactgg aacccaacca 360
gcctcctaga ccacggttct tcccatcaat ggaatgctag agactccagc caggtgggta 420
ccgagctcga attcgtaatc atgggtcatag ctgtttcctg                                     460

```

&lt;210&gt; 58

&lt;211&gt; 1049

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 58

```

atctgatcaa gaatacctgc cctgggtcact ctgcggatgt ttctgtccac ttgttcacat 60
tgaggaccaa gatatccttt ttacagagg cacttgctcg gtctaacaca gacacctcca 120
tgacgacatg ctggctcaca ttttgagtt ctgcagaagt cccctccca gcctggacta 180
cagcagcact ttcccgtggg ggtgcagtag ccgtttcgac agagcctgga gcaactctgaa 240
gtcagtgtct gtgcaggttg taccgtggct ctgcattcct caggcattaa aggtcttttg 300
ggatctacaa ttttgtagag ttttccattg tgagtctggg tcatactttt actgcttgat 360
aaaatgtaaa cttcacctag ttcattctct ccaaatccca agatgtgacc ggaaaagtag 420

```

```

cctctacagg acccactagt gccgacacag agtgggtttt cttgccactg ctttgtcaca 480
ggacttttgct ggagaggttag gaaattccca ttacgatctc caaacacgta gcttccatac 540
aatcttttctg actggcagcc ccggtatata aatccaccaa ccaaaggacc attactgaat 600
ggcttgaatt ctaaaagtga tggctcactt tcataatctt tcccctttat tatctgtaga 660
attctggctg atgatctggt ttttccattg gagtctgaac acagtatcgt taaattgatg 720
tttatatcag tgggatgtct atccacagca catctgcctg gatcgtggag cccatgagca 780
aacacttcgg ggggctgggt ggtgctgttg aagtgtgggt tgctccttgg tatggaataa 840
ggcacgttgc acatgtctgt gtccacatcc agccgtagca ctgagcctgt gaaatcactt 900
aaccocatcca tttcttccat atcatccagt gtaatcatcc catcaccaag aatgatgtac 960
aaaaaccctg cagggccaaa gagcagttgc cctcccagat gctttctgtg gagttctgca 1020
acttcaagaa agactctggc tgttctcaa                                1049

```

<210> 59

<211> 747

<212> DNA

<213> Homo sapiens

<400> 59

```

tttttcaaat cacatatggc ttctttgacc ccatcaaata actttattca cacaaacgtc 60
ccttaattta caaagcctca gtcattcata cacattaggg gatccacagt gttcaaggaa 120
cttaaatata atgtatcata ccaacccaag taaaccaagt aaaaaaata ttcataataa 180
gttgttcaca cgtaggtcct agattaccag cttctgtgca aaaaaaggaa atgaagaaaa 240
atagatttat taactagtat tggaaactaa ctttgtgcct ggcttaaaac ctccctcacg 300
ctcgtctgtc ccacacaaat gttaaagaag tcactgcaat gtactccccg gctctgatga 360
aaagaagccc ctggcacaaa agattccagt gcccctgaag aggetccctt cctcctgtgg 420
gctctcctag aaaaccagcg ggacggcctc cctgctgata ccgtctataa ccttaggggg 480
ccctcgggca ggcaacggca gtggactcat ctcggtgatg gctgtagatg ctaacactgg 540
ccaattcaat gccacaccta ctggttaccc tttgagggca tttctccaga cagaagcccc 600
ttgaagccta ggtagggcag gatcagagat acaccctgtt ttgtctcgaa gggctccaca 660
gcccagtagc acatgcttgc agaagtagta tctctggact tctgectcca gtcgaccggc 720
cgcgaaattta gtagtaatag cggccgc                                747

```

<210> 60

<211> 1036

<212> PRT

<213> Homo sapiens

<400> 60

```

Met Tyr Leu Val Ala Gly Asp Arg Gly Leu Ala Gly Cys Gly His Leu
  1              5              10              15

Leu Val Ser Leu Leu Gly Leu Leu Leu Leu Pro Ala Arg Ser Gly Thr
      20              25              30

Arg Ala Leu Val Cys Leu Pro Cys Asp Glu Ser Lys Cys Glu Glu Pro
      35              40              45

Arg Asn Arg Pro Gly Ser Ile Val Gln Gly Val Cys Gly Cys Cys Tyr
      50              55              60

Thr Cys Ala Ser Gln Gly Asn Glu Ser Cys Gly Gly Thr Phe Gly Ile
      65              70              75              80

Tyr Gly Thr Cys Asp Arg Gly Leu Arg Cys Val Ile Arg Pro Pro Leu
      85              90              95

```

Asn	Gly	Asp	Ser	Leu	Thr	Glu	Tyr	Glu	Ala	Gly	Val	Cys	Glu	Asp	Glu	
			100					105					110			
Asn	Trp	Thr	Asp	Asp	Gln	Leu	Leu	Gly	Phe	Lys	Pro	Cys	Asn	Glu	Asn	
			115				120					125				
Leu	Ile	Ala	Gly	Cys	Asn	Ile	Ile	Asn	Gly	Lys	Cys	Glu	Cys	Asn	Thr	
	130					135					140					
Ile	Arg	Thr	Cys	Ser	Asn	Pro	Phe	Glu	Phe	Pro	Ser	Gln	Asp	Met	Cys	
145					150					155					160	
Leu	Ser	Ala	Leu	Lys	Arg	Ile	Glu	Glu	Glu	Lys	Pro	Asp	Cys	Ser	Lys	
				165					170						175	
Ala	Arg	Cys	Glu	Val	Gln	Phe	Ser	Pro	Arg	Cys	Pro	Glu	Asp	Ser	Val	
			180					185					190			
Leu	Ile	Glu	Gly	Tyr	Ala	Pro	Pro	Gly	Glu	Cys	Cys	Pro	Leu	Pro	Ser	
		195					200					205				
Arg	Cys	Val	Cys	Asn	Pro	Ala	Gly	Cys	Leu	Arg	Lys	Val	Cys	Gln	Pro	
	210					215					220					
Gly	Asn	Leu	Asn	Ile	Leu	Val	Ser	Lys	Ala	Ser	Gly	Lys	Pro	Gly	Glu	
225					230					235					240	
Cys	Cys	Asp	Leu	Tyr	Glu	Cys	Lys	Pro	Val	Phe	Gly	Val	Asp	Cys	Arg	
				245					250					255		
Thr	Val	Glu	Cys	Pro	Thr	Val	Gln	Gln	Thr	Ala	Cys	Pro	Pro	Asp	Ser	
			260					265					270			
Tyr	Glu	Thr	Gln	Val	Arg	Leu	Thr	Ala	Asp	Gly	Cys	Cys	Thr	Leu	Pro	
		275					280					285				
Thr	Arg	Cys	Glu	Cys	Leu	Ser	Gly	Leu	Cys	Gly	Phe	Pro	Val	Cys	Glu	
	290					295					300					
Val	Gly	Ser	Thr	Pro	Arg	Ile	Val	Ser	Arg	Gly	Asp	Gly	Thr	Pro	Gly	
305					310					315					320	
Lys	Cys	Cys	Asp	Val	Phe	Glu	Cys	Val	Asn	Asp	Thr	Lys	Pro	Ala	Cys	
				325					330					335		
Val	Phe	Asn	Asn	Val	Glu	Tyr	Tyr	Asp	Gly	Asp	Met	Phe	Arg	Met	Asp	
			340					345					350			
Asn	Cys	Arg	Phe	Cys	Arg	Cys	Gln	Gly	Gly	Val	Ala	Ile	Cys	Phe	Thr	
		355					360					365				
Ala	Gln	Cys	Gly	Glu	Ile	Asn	Cys	Glu	Arg	Tyr	Tyr	Val	Pro	Glu	Gly	
	370					375					380					
Glu	Cys	Cys	Pro	Val	Cys	Glu	Asp	Pro	Val	Tyr	Pro	Phe	Asn	Asn	Pro	
385					390					395					400	

Ala Gly Cys Tyr Ala Asn Gly Leu Ile Leu Ala His Gly Asp Arg Trp  
 405 410 415  
 Arg Glu Asp Asp Cys Thr Phe Cys Gln Cys Val Asn Gly Glu Arg His  
 420 425 430  
 Cys Val Ala Thr Val Cys Gly Gln Thr Cys Thr Asn Pro Val Lys Val  
 435 440 445  
 Pro Gly Glu Cys Cys Pro Val Cys Glu Glu Pro Thr Ile Ile Thr Val  
 450 455 460  
 Asp Pro Pro Ala Cys Gly Glu Leu Ser Asn Cys Thr Leu Thr Arg Lys  
 465 470 475 480  
 Asp Cys Ile Asn Gly Phe Lys Arg Asp His Asn Gly Cys Arg Thr Cys  
 485 490 495  
 Gln Cys Ile Asn Thr Gln Glu Leu Cys Ser Glu Arg Lys Gln Gly Cys  
 500 505 510  
 Thr Leu Asn Cys Pro Phe Gly Phe Leu Thr Asp Ala Gln Asn Cys Glu  
 515 520 525  
 Ile Cys Glu Cys Arg Pro Arg Pro Lys Lys Cys Arg Pro Ile Ile Cys  
 530 535 540  
 Asp Lys Tyr Cys Pro Leu Gly Leu Leu Lys Asn Lys His Gly Cys Asp  
 545 550 555 560  
 Ile Cys Arg Cys Lys Lys Cys Pro Glu Leu Ser Cys Ser Lys Ile Cys  
 565 570 575  
 Pro Leu Gly Phe Gln Gln Asp Ser His Gly Cys Leu Ile Cys Lys Cys  
 580 585 590  
 Arg Glu Ala Ser Ala Ser Ala Gly Pro Pro Ile Leu Ser Gly Thr Cys  
 595 600 605  
 Leu Thr Val Asp Gly His His His Lys Asn Glu Glu Ser Trp His Asp  
 610 615 620  
 Gly Cys Arg Glu Cys Tyr Cys Leu Asn Gly Arg Glu Met Cys Ala Leu  
 625 630 635 640  
 Ile Thr Cys Pro Val Pro Ala Cys Gly Asn Pro Thr Ile His Pro Gly  
 645 650 655  
 Gln Cys Cys Pro Ser Cys Ala Asp Asp Phe Val Val Gln Lys Pro Glu  
 660 665 670  
 Leu Ser Thr Pro Ser Ile Cys His Ala Pro Gly Gly Glu Tyr Phe Val  
 675 680 685  
 Glu Gly Glu Thr Trp Asn Ile Asp Ser Cys Thr Gln Cys Thr Cys His  
 690 695 700

Ser Gly Arg Val Leu Cys Glu Thr Glu Val Cys Pro Pro Leu Leu Cys  
 705 710 715 720  
 Gln Asn Pro Ser Arg Thr Gln Asp Ser Cys Cys Pro Gln Cys Thr Asp  
 725 730 735  
 Gln Pro Phe Arg Pro Ser Leu Ser Arg Asn Asn Ser Val Pro Asn Tyr  
 740 745 750  
 Cys Lys Asn Asp Glu Gly Asp Ile Phe Leu Ala Ala Glu Ser Trp Lys  
 755 760 765  
 Pro Asp Val Cys Thr Ser Cys Ile Cys Ile Asp Ser Val Ile Ser Cys  
 770 775 780  
 Phe Ser Glu Ser Cys Pro Ser Val Ser Cys Glu Arg Pro Val Leu Arg  
 785 790 795 800  
 Lys Gly Gln Cys Cys Pro Tyr Cys Ile Lys Asp Thr Ile Pro Lys Lys  
 805 810 815  
 Val Val Cys His Phe Ser Gly Lys Ala Tyr Ala Asp Glu Glu Arg Trp  
 820 825 830  
 Asp Leu Asp Ser Cys Thr His Cys Tyr Cys Leu Gln Gly Gln Thr Leu  
 835 840 845  
 Cys Ser Thr Val Ser Cys Pro Pro Leu Pro Cys Val Glu Pro Ile Asn  
 850 855 860  
 Val Glu Gly Ser Cys Cys Pro Met Cys Pro Glu Met Tyr Val Pro Glu  
 865 870 875 880  
 Pro Thr Asn Ile Pro Ile Glu Lys Thr Asn His Arg Gly Glu Val Asp  
 885 890 895  
 Leu Glu Val Pro Leu Trp Pro Thr Pro Ser Glu Asn Asp Ile Val His  
 900 905 910  
 Leu Pro Arg Asp Met Gly His Leu Gln Val Asp Tyr Arg Asp Asn Arg  
 915 920 925  
 Leu His Pro Ser Glu Asp Ser Ser Leu Asp Ser Ile Ala Ser Val Val  
 930 935 940  
 Val Pro Ile Ile Ile Cys Leu Ser Ile Ile Ile Ala Phe Leu Phe Ile  
 945 950 955 960  
 Asn Gln Lys Lys Gln Trp Ile Pro Leu Leu Cys Trp Tyr Arg Thr Pro  
 965 970 975  
 Thr Lys Pro Ser Ser Leu Asn Asn Gln Leu Val Ser Val Asp Cys Lys  
 980 985 990  
 Lys Gly Thr Arg Val Gln Val Asp Ser Ser Gln Arg Met Leu Arg Ile  
 995 1000 1005

Ala Glu Pro Asp Ala Arg Phe Ser Gly Phe Tyr Ser Met Gln Lys Gln  
1010 1015 1020

Asn His Leu Gln Ala Asp Asn Phe Tyr Gln Thr Val  
1025 1030 1035